

BULLETIN

OF THE

DEPARTMENT OF LABOR.

No. 16—MAY, 1898.

ISSUED EVERY OTHER MONTH.

EDITED BY

CARROLL D. WRIGHT,
COMMISSIONER.

OREN W. WEAVER,
CHIEF CLERK.

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**THE ALASKAN GOLD FIELDS AND THE OPPORTUNITIES THEY
OFFER FOR CAPITAL AND LABOR.**

BY SAM. C. DUNHAM.

[Recognizing the desire for trustworthy information relating to the opportunities for remunerative employment of American labor and capital in the gold regions in the Yukon Valley and adjoining territory, Mr. Samuel C. Dunham, of this Department, was directed to proceed to Alaska and to the locality of the gold regions for the purpose of making an official investigation. The Department was in receipt of so many inquiries relative to wages, cost of living, and other matters relating to the mining industry in Alaska that it was deemed advisable to make the investigation. Instructions were given Mr. Dunham July 29, 1897, and he left Washington on the 31st. Mr. Dunham was selected because of his experience of twelve years or more in gold and silver mining districts, his familiarity with mining processes and the habits of miners fitting him thoroughly for the proposed inquiry. In addition to his knowledge of mining matters, he is an expert stenographer, which qualification has enabled him to take down statements for his report when made to him, thus avoiding the necessity of depending upon memory for transcription.

Mr. Dunham's report is herewith given to the public. It brings matters up to January 8, 1898. In transmitting his report Mr. Dunham informs the Department of the great difficulties that he had to overcome in securing information. These difficulties arose in many ways, chiefly in the verification of statements, and from the habits of miners to exaggerate their accounts of output and conditions. Only personal observations could secure the real facts.

Mr. Dunham acknowledges his indebtedness for courtesies and assistance extended by Hon. Joseph W. Ivey, collector of customs for

the district of Alaska, Sitka; C. Constantine, inspector Northwest mounted police, Dawson, Northwest Territory; Capt. J. E. Hansen, assistant superintendent of the Alaska Commercial Company, Dawson; Capt. John J. Healey, manager of the North American Transportation and Trading Company, Dawson; Hon. John E. Crane, United States commissioner, Circle City, Alaska; Mr. Charles Smith, deputy collector of customs, Circle City; Mr. Howard Turner, agent Alaska Commercial Company, Circle City; Mr. George E. King, agent North American Transportation and Trading Company, Circle City; Mr. W. A. Beddoe, editor of the Alaska Miner, Juneau; Mr. F. D. Nowell, of the Berners Bay Mining Company, Juneau, and the Alaska Chamber of Commerce, Juneau. Special thanks are also due Ernest O. Crewe, M. D., of Chicago, Ill., who at the time of Mr. Dunham's investigations was at Circle City, for the preparation of that portion of his report relating to the climatic conditions and agricultural resources of Alaska, and to Capt. P. H. Ray, U. S. A. For the accompanying general map acknowledgment is hereby rendered to Mr. J. B. Tyrrell, of Washington, D. C.—C. D. W.]

INTRODUCTION.

On July 15, 1897, the steamer *Excelsior* entered her dock at San Francisco with a party of miners returning home from the Yukon River. The dispatches which went to the country through the press that evening and the following morning announced that a large amount of gold dust, variously stated at from \$500,000 to \$750,000, had been brought down on the *Excelsior*, and gave the details of the discovery and partial development the previous fall and winter of rich placer gold diggings on tributaries of the Klondike, a small river flowing into the Yukon from the eastward at a point in Northwest Territory not far from the boundary line between American and British territory. The news created some excitement among the miners of the West, but attracted no great attention in the East. On July 17 the steamer *Portland* landed at Seattle with some sixty miners from the Klondike and bringing gold dust to the value of \$800,000. This news was so skillfully handled by enterprising newspapers that within a week thousands of men, many of whom had never taken hold of pick or shovel with serious intentions in their lives, were making preparations to go to the new gold fields, and by August 1 the most dramatic, if not the most extensive, exodus since that of 1849 was well under way. Men who had participated in the great exodus of nearly half a century ago, in reading the accounts, felt their nerves tingle as they recalled the golden days of the fifties, and many of these old pioneers outfitted their sons and nephews and bade them Godspeed to the new Eldorado; while a million artisans and laborers, who during the long industrial depression had toiled for a bare subsistence or had not toiled at all, looked longingly toward the North. The contagion spread to all classes—laborers, clerks, merchants,

bankers, lawyers, physicians, ministers of the gospel—and even Federal and State officials were so charmed by the alluring picture drawn by the press that they resigned their positions to undergo the hardships of the perilous journey to the Klondike, presumably to engage in the arduous labor of mining. While it was evident that the mass of matter on the subject appearing in the daily press contained much that was exaggerated and untrue, yet it was recognized that truth also pervaded the stories that were told, for the amount of gold brought by the miners from the Yukon indicated beyond doubt that a strike of extraordinary character had been made. The demand at Washington from all parts of the country for authentic information on the subject had become so great by the latter end of July that the Commissioner of Labor felt impelled to make an official inquiry relative to the condition of affairs in the Yukon gold fields, and the writer was ordered to make the investigation, in accordance with the following letter of instructions, of date July 29, 1897:

You are hereby assigned to duty in Alaska and British America for the purpose of making an investigation relative to the opportunities which the gold regions in the Yukon Valley and adjoining territory afford for the remunerative employment of American labor and capital. Please proceed at once to Circle City or Dawson City, as may be most practicable. Your study of the conditions in the recently discovered gold fields and the surrounding country should be thorough, and so conducted as to enable you to ascertain full and complete information as to the means and expense of reaching such localities, the demand for labor, rates of wages, cost of living, etc., and also the extent and value of the present workings and the best localities for settlement. Your inquiries should include not only the gold fields and vicinity, but such other localities in Alaska as are affected by the gold discoveries. You should keep constantly in mind that the chief purpose of the investigation is to ascertain what avenues are open for the employment of labor and the conditions under which such employment can be secured.

Your report should be made at the earliest possible date consistent with a thorough and exhaustive examination along the lines indicated and in the territory assigned to you.

Please keep the Department fully informed from time to time as to the progress of your work, bearing in mind any unusual developments which may occur in the gold fields, in order that the people in this country may receive prompt and authentic information in relation thereto.

This report embodies the result of the investigation made under the above letter of instructions.

THE TRAILS.

There are four principal trails that were traveled to a greater or less extent by those going to the Yukon gold fields during the past season.

The first that will be considered is the Stikeen route. Disembarking from the ocean steamer at Wrangell, the traveler takes a river

steamboat at that place and ascends the Stikeen River to the town of Telegraph, about 150 miles from Wrangell. The fare is \$10, with an allowance of 100 pounds of baggage. From Telegraph to the head of Lake Teslin there is a portage of 122 miles, and during the past summer pack horses were used on the trail, the charge for packing being $17\frac{1}{2}$ cents per pound. At the head of Lake Teslin there is an abundance of timber for the construction of boats, but as there is no saw-mill it is necessary for travelers to whipsaw lumber and build their own boats. It is reported that a sawmill will be in operation there in the spring. Lake Teslin is 104 miles long and is the source of the Teslin (Hootalinqua) River, which enters Lewes River 128 miles above Five Finger Rapids, the distance from the head of the lake to Dawson being 584 miles. The principal advantage of this route is that it avoids the Grand Canyon and the White Horse Rapids, but on account of the long portage it was chosen by comparatively few gold seekers during the past season, probably not over one hundred in all. It is authentically stated that the Canadian Government is constructing a wagon road from Telegraph to the head of Lake Teslin and that Canadian capitalists are building two small steamers during the present winter for service from the head of the lake to Dawson, expecting to have them ready for traffic on the opening of navigation in the spring.

The Chilkat or Dalton trail leaves Lynn Canal at Pyramid Harbor, the mouth of the Chilkat River, and ascends that stream about seventy-five miles, to the summit of Chilkat Pass; thence passing through low, bald hills and across rolling prairies to Fort Selkirk, five miles below the mouth of the Pelly and about 325 miles from Chilkat Pass. The old Dalton trail, which has been practically abandoned, strikes Lewes River just below Five Finger Rapids. The Dalton trails were used by cattle drovers during the past season, one herd having been taken in by the old route, and a few miners passed over the new trail with pack horses. There are quite a number of deep streams to cross, it often being necessary during high water to swim them. This is considered by many practical men to be the most feasible route for a railroad to the Yukon.

The Skagway River enters Lynn Canal near its head, about five miles by water below Dyea. The Skagway trail, the favorite route of the Canadians, follows the river to the summit, a distance of about twenty miles, and thence through a succession of hills, bogs, and meadows to Lake Bennett, the distance from Skagway Harbor to the lake being about forty-five miles. For four miles from Skagway there is a fairly good wagon road, and freight is transported that distance in wagons. At this point the trail ascends the mountain side, traversing precipitous, rocky hillsides eight miles, and then crosses the river and continues its course on the opposite side of the stream to the summit. On August 22 there were about 4,000 men and 2,000 horses on this trail, and but few had succeeded in getting past the summit with their outfits on account of its miry condition. The price

for packing to Lake Bennett was 30 cents per pound, and horses were selling for from \$150 to \$300 a head. The price of hay was \$360 per ton, and Klondike prices prevailed generally, a pair of shoes costing \$10, woolen mittens \$3, and other articles of wearing apparel in like proportion. The town of Skagway had a temporary population of about 1,000, there being a few buildings constructed of rough lumber, while most of the people were living in tents. A town site had been located and surveyed, and the place possessed all the characteristics of a boom town on the Western plains. The steamers arriving at Skagway discharged their passengers and cargoes by means of lighters, there being no wharf and the harbor being very shallow near shore. The tides being high here, freight landed on the beach at low tide was frequently caught by the incoming tide before it could be transported to a place of safety, and in this way much loss occurred. The agents of the steamship companies made no effort to avoid such disasters to the property of their patrons, their entire energies being strained to the utmost to unload their vessels as quickly as possible in order to get them back to the lower ports, where thousands of people were anxiously awaiting their turn to be treated in like manner. The steamship companies were building a wharf, and it is probable that the state of affairs described will be improved by the season of 1898. During July Dyea was made a subport of entry, but, as Skagway has a deeper harbor than Dyea, most of the vessels landed their cargoes at Skagway and the United States customs officials made their headquarters there and were actively engaged in collecting duties on unbonded Canadian goods. There were many vigorous protests from the Canadians against what they considered the injustice of taxing goods which were simply in transit through a narrow strip of American territory for consumption on British soil, and they especially complained of the \$30 duty being charged on horses, many of which had cost in British Columbia less than the amount of the duty imposed.

The Chilkoot or Dyea trail is the overland route to the Yukon that has been most generally chosen during past years by gold seekers, and a very large proportion of those who succeeded in getting to the gold fields last summer went in by this trail. The best time to start from Dyea is between the middle of March and the last of April, as it is then comparatively easy to transport outfits by means of sleds to the foot of Lake Bennett, or even farther, where good timber for boat building can be found in abundance. By adopting this course the tedious and difficult trip over the Chilkoot Pass, and the voyage through the lakes, after the ice breaks up in May, are avoided, the journey being made through the canyon of the Dyea (Taiya) River. Parties of three or four should be organized, as one tent and camp outfit, whipsaw, etc., will suffice for all.

The customary rate for packing from Dyea to Lindeman has been 14 cents per pound, but during the past summer it rose to 47 cents, the rate on August 23 being 38 cents. These high rates were the result of

the voluntary bids for the services of packers by men of means who were anxious to get to the Klondike without delay, the Indian packers, having once received an advance price refusing to work for the old rate. These prices were practically prohibitory to gold seekers of ordinary means, and they were obliged to pack their supplies themselves, many of them having been six weeks on the trail and not having yet succeeded in getting their outfits over. The average load of a white packer was 100 pounds, and it required four days to make the round trip to Lake Lindeman, a distance of twenty-seven miles. On August 23 there were about 1,500 men on the trail en route to the Klondike, and about 250 Indians and 150 white men were engaged in packing. About 150 head of horses were in use, packing as far as Sheep Camp, fourteen miles from Dyea, starting from the ferry, to which point freight was transported in wagons. Canoes were used for carrying outfits to the head of canoe navigation, six miles from Dyea. The Indians, as a rule, packed direct from Dyea to Lindeman, carrying from 100 to 220 pounds each, while the white packers were generally employed from the head of canoe navigation and from Sheep Camp to transport the freight carried to those points by canoes and horses, their packs ranging from 75 to 150 pounds. Freight and passengers for Dyea are landed on the beach in the same manner as at Skagway, and much loss occurred by the washing away of supplies by the incoming tide. The cost for transporting freight from the beach to the village of Dyea, about two miles, was \$5 per ton. A first-class outfit for one man weighs from 1,200 to 1,500 pounds, costing from \$150 to \$200 at Seattle or Juneau, and no one should venture into the interior with less than the smaller weight named.

The details of the journey from Dyea to Dawson are given in the form of a diary, commencing August 23, 1897, as it is thought that they can best be presented in this way.

August 23.—Started from Dyea for Lake Lindeman with four Indians—Sleepy Tom, Right Eye, Slim Jim, and Chilkat Jack—each with a pack of 100 pounds; rate, 38 cents per pound. It had been threatening rain all the morning, and it was with great difficulty that the Indians could be induced to move. Finally, at 11 a. m., they were prevailed upon to set out, and they disappeared in the woods up the trail, while their victim struggled into the pack straps containing his valise, rubber boots, rifle, and oilskin, the entire weight of the pack, according to the scales, being forty-seven pounds. Followed Indians as rapidly as possible, but could not catch them. Evidently good walkers. After proceeding about three-quarters of a mile became convinced that the Dyea scales required adjustment, as the pack seemed to weigh much more than forty-seven pounds. Met a little Indian boy returning from the ferry with a small cart. As he was evidently in the freighting business, a proposition was made to him to transport pack to the ferry, which he agreed to do for \$1. Arrived at ferry, one mile from Dyea, at 11.30.

The river at this point is about 200 feet wide, being very swift and deep. Discharged freighter and crossed the river; ferry charge, 50 cents. Was informed that four Indians had just left, and that they could not be more than 100 yards ahead. Proceeded up the trail, and about half a mile above the ferry caught up with a Cœur d'Alene miner with two pack horses. Having had but little experience in packing, he was having trouble with his packs, which frequently came in contact with the trees on the narrow trail. One horse was unevenly loaded, with a 100-pound gunny of flour on one side and fifty pounds of beans on the other. The miner suggested that the valise would just about balance the pack, and he was allowed to use it for the purpose suggested. Proceeded without further trouble to the head of canoe navigation, six miles from Dyea. The trail from the ferry to this point winds through the woods and along a dry channel of the river. In the woods the traveler has his first experience with Alaska muck and roots. In many places the trail is cut to a depth of eighteen inches, and every few feet an uncovered root extends across the pathway, requiring a species of pedestrianism akin to walking in a row of bushel baskets. Where the trail follows the old river bed there are alternate stretches of sand and cobblestones, rendering progress exceedingly slow and fatiguing. The river is crossed three times between the ferry and the camp at the head of canoe navigation, it being necessary to wade the stream at the first and second crossings, where the water is from two to three feet deep and very swift, while at the third crossing there is a good footbridge. Arrived at the camp at head of canoe navigation at 3 o'clock. There are twenty-five or thirty tents here. Bade a reluctant adieu to Cœur d'Alene miner and employed Indian packer to carry valise to Sheep Camp, eight miles farther up the trail, being obliged to accede to his demand for compensation at 100-pound rate, or \$10 for the eight miles. The trail follows the dry channel for two or three miles and then ascends the precipitous side of the canyon, it being necessary in many places to climb to a height of three or four hundred feet above the river, only to descend a steep incline and scale another hill worse than the last. In the ravines and lowlands there is always a bed of muck, produced by decayed vegetation and the washing down of the soil from the steep hillsides by the heavy and almost incessant rains. The worst places have been corduroyed at an expense of several thousand dollars. Many Indian and white packers are met on the trail, returning to Dyea. Inquiry of the one or two white packers from whom any reply whatever could be extracted, elicited the information that four Indians had been met just this side of Sheep Camp. Sociability is at a discount on the Dyea trail. Your respectful greeting of "good afternoon" is received by an Indian with a grunt and by a white man with a surprised stare that makes you feel that you have committed a grave breach of etiquette, and you soon learn to keep your mouth shut, except to catch your breath on the steep inclines. Arrived at Sheep Camp at 7 o'clock.

There are probably 150 tents here, and a temporary population of 300 or 400. The camp is located on the banks of the Dyea River, which is here a rushing torrent 30 or 40 feet wide. Mountains of Alpine grandeur rise on either side, and the gorges are filled by glaciers which discharge into the river in numerous waterfalls. On inquiry at the Indian camp it was learned that Sleepy Tom & Co. had gone on to Stone House, two miles farther up the trail. Stayed for the night at the Palmer House, the largest hotel in Sheep Camp. This structure, which is the most imposing in the place, is constructed of rough boards, and is about 25 by 50 feet in size, having but one story containing one room. About one-fourth of the rear portion is partitioned off by means of a calico portiere, and is used for kitchen and general living room of the landlord and family. Application for supper was met by a statement from the landlord that he had fed 500 people during the day, and that everything was eaten up; but a somewhat prolonged appeal resulted in the production of two biscuits, a slice of bacon, and a cup of tea, the charge being 75 cents in advance, this requirement being based on the absence of heavy baggage. During the evening the landlord related some incidents in his career. He had farmed and reared children in Wisconsin, until the hard times and the needs of a large family drove him to Seattle, but unfortunately he struck that town in the wane of its boom, and after struggling against fate for a year or two he decided to try his fortunes in the frozen North. He arrived at Juneau in May with his wife, seven children, and \$8. His grit was of a kind that gained the good will of kind people in Juneau, who made it possible for him to come to Dyea, with his two half-grown sons, to engage in packing on the trail. After some weeks of most exacting labor he found himself financially equipped to cater to the Sheep Camp needs, and, assisted by his wife and seven children, has since been doing a large and profitable business. The sons are still packing on the trail and making from \$10 to \$15 a day apiece. So much for clear grit and a staunch heart. Some forty of the guests were accommodated with lodgings on the floor, each furnishing his own blankets. Was invited to share the blankets of a gentleman who had been confined to the hotel for two or three weeks on account of a broken ankle.

August 24.—Landlord refused payment for lodging, and even apologized for the lack of accommodations. This fact, even without the knowledge obtained in the conversation last night, stamps him as a "cheechako."^a After breakfast employed packer to carry valise to Lake Lindeman at a cost of \$16, and at 8.30 a. m. proceeded on the way in a drizzling, cold rain. At the foot of the Chilkoot Pass, four miles from Sheep Camp, which point was reached at 10.30, a large number of white men and Indians were camped, many of whom had attempted to cross,

^a A Chinook word meaning "newcomer," and having the same signification as "tenderfoot" on the upper Missouri. It is applied to everyone who has not passed a winter here.

but had cached their packs and returned. They stated that a terrific storm was raging on the summit and that it was impossible to get over. On inquiry, it was learned that Sleepy Tom and his party had reached the summit last night, and as it was necessary to be at Lindeman in order to receive outfit and pay them off, it was decided to attempt the journey. The rugged slope of the Chilkoot loomed up at an angle of 45 degrees, disappearing in the clouds and mist a hundred feet above. The trail leads up rocky ledges and along smooth boulders, some of which are fifty feet in length, and across the face of glaciers many acres in extent, and in places skirting precipices projecting over gorges hundreds of feet in depth. There is no vegetation above the foot of the pass, and in the absence of trees and shrubs, which abound along other portions of the trail, the only recourse in case of a slip or stumble is to catch at the rocks, which in their wet condition offer a poor hold for the hand. A number of packers were met high up on the trail, who stated that it was dangerous to go on; that they had gone nearly to the summit, but were forced to return on account of the storm. By this time the rain had turned to sleet, and, as the wind was blowing a hurricane, it cut the face like needles and rendered the pathway exceedingly slippery and the footing uncertain. Fortunately, when about two-thirds of the ascent was accomplished, the wind shifted to the west, coming up the pass and greatly assisting progress. On account of the great exertion in climbing the steeps, was obliged to stop at frequent intervals for a breathing spell; but the moment the exertion ceased a chill ensued, making it necessary to move on to avoid freezing. Reached the summit at 11.30, having been one hour in making the ascent, wet to the skin, with shoes full of water, and chilled to the marrow. From the summit to Crater Lake, a distance of one and a half miles, the descent is steep and the trail slippery and treacherous. Arrived at Crater Lake at 1 p. m., and found that the ferry was not running on account of the high wind, making it necessary to proceed by way of the trail. At 2 o'clock reached Happy Camp. Applied at half a dozen of the score or so of tents for a cup of coffee, but was refused, although in each case payment was tendered. A man with a pile of grub six feet high in front of his tent declined to part with enough of it, even for pay, to enable a fellow-traveler to reach his own outfit a few miles farther on. Seemed to be possessed by a fear that next year, about June, perhaps, he was liable to run short of some luxury. Reached the foot of Long Lake, three miles from Lindeman, at 4 o'clock. Quite a number of tents here. Applied at one for a cup of coffee, and received a hearty invitation from the three occupants, all sturdy young men from Montana, to join them in the meal they were preparing. An attempted apology for the intrusion met with the unanimous assurance from the young men that none was necessary, as they had themselves but ten minutes before taken possession of the tent, which they had found unoccupied. After a sumptuous dinner of baking-powder biscuits, bacon, beans, and coffee, a

letter was written to the owner of the tent, thanking him for his hospitality, signed by his four guests, and left on the grub box. Arrived at Lake Lindeman at 7 o'clock. The camp at the head of the lake contains about fifty tents and a temporary population of 200. Sleepy Tom et al. not yet here. Situation somewhat discouraging; no blankets, no food—nothing but wet clothes and a bad cold. Made the acquaintance of two brothers from Juneau, and on statement of circumstances was invited to share their tent, given a change of clothing and half a tea-cupful of Hudson Bay rum, and put to bed. Opinion of the people on the trail improving.

August 25.—Spent the day in inspecting the camp. Fifteen boats are in course of construction, whipsawed lumber being used. Logs are getting scarce, it being necessary to go two or three miles across the lake to get good ones. Lumber is selling for \$500 a thousand at the sawmill at Lake Bennett, eight miles below. Boat large enough to carry three men sold to-day for \$375. Prices of all articles practically prohibitory for men of ordinary means. Flour and bacon cost \$50 a hundred laid down here, and can scarcely be bought at any price. Good pair of shoes costs \$15. Two men working together, whipsawing lumber, sell their day's product for \$50, and packers receive as high as \$25 a day and board. Has been raining steadily all day, and it is reported that there is a bad storm on the summit. No Indians have crossed the pass since the 21st.

August 26.—Still raining. No Indians.

August 27.—Right Eye arrived at 9 a. m. Brings letter from postmaster at Dyea, stating that Sleepy Tom, Slim Jim, and Chilkat Jack are still there; that the four Indians had come only half a mile or so on the 23d, and then took to the woods and went back home to await good weather. Still raining, but barometer indicates clear weather.

August 28.—Sleepy Tom and Slim Jim arrived at 9 a. m., with packs containing blankets and typewriter. Typewriter in bad condition, sole leather case having collapsed on account of the soaking rain. Should have been packed in a box. Have made arrangements for passage down the river. Construction of the boat begins to-morrow, and hope to be ready to leave within three days. Secured hind quarter of caribou to-day; price, 50 cents per-pound. An improvement on bacon. Weather has cleared up, and seven boats got away to-day. Seventy-five Indian packers and about fifty white men got over to-day. They report that the summit has been impassable for three days. The price of packing has increased to 40 cents per pound. Whisky selling to-day for \$8 a bottle, and reported not a very good article at that.

August 29 (Sunday).—Last pack got in at 11 a. m. Chilkat Jack jumped his contract, and postmaster at Dyea employed Tagish Tom as a substitute. Tom somewhat under the influence of Long Lake whisky, but got here just the same. Man with 26-foot boat on Long Lake is making \$250 a day ferrying freight down the lake. Left at 11 a. m. for

Lake Bennett in Peterboro canoe. Outfit of entire party, weighing 4,000 pounds, was ferried to the foot of Lake Lindeman, six miles, for \$30. The lake is a beautiful sheet of water, about six miles long and one mile wide. It empties into Lake Bennett through a very crooked and narrow stream, full of rocks and rapids, and dangerous for boats. It is necessary to make a portage of three-quarters of a mile to the head of Lake Bennett, boats being let down through the swift stream by means of ropes. Reached the foot of the lake at 12.30 p. m., made the portage, and camped at the head of Lake Bennett at 5 p. m. Wages and prices at Lindeman and Bennett to-day: Whisky, \$8 a bottle and 50 cents a drink; bacon, \$1 per pound; flour, \$80 per hundred; dried fruit, \$50 per hundred; beans, \$50 per hundred; tobacco, \$2 per pound; fish and game, \$1 per pound; nails, \$1 per pound; horse shoes, \$5 apiece; horseshoe nails, \$1 apiece; boots, \$18; shoes, \$12 to \$15; wages of boatbuilders, \$15 a day and board. Many packers are making from \$25 to \$30 a day. About 200 people are camped here, there being forty or fifty tents scattered along the lake shore. The Skagway trail ends here. About 100 men have succeeded in getting their outfits to Bennett by the Skagway route. It is reported that the trail has been much improved, and that many hundreds will get over in the course of the next fortnight. The price of packing on the Skagway trail has risen to 60 cents per pound.

August 30.—Raw and cold, and a drizzling rain fell all night. The temperature is getting lower and lower; 45 this morning. It has been snowing on the mountains for two or three days, and the snow line is creeping toward the valleys at the rate of 500 feet a day, it now being about 3,000 feet above sea level and 1,000 above the valleys. Learned to-day that the man who has been building boat at sawmill two miles across the head of the lake has been sick and made no progress. Nominal price of lumber at sawmill, \$500 a thousand, but it is impossible to secure any, as the proprietors require their entire output (800 feet per day) for the construction of boats already contracted for. Two-ton boats selling to-day for \$350 and \$400. Rained all day, with cold wind from the north.

August 31.—Met sergeant of the Northwest mounted police, who is here with a pioneer party of seven men for the purpose of building boats for the transportation to Lake Tagish and Dawson of six officers and twenty men of the force now coming over the Skagway trail. Received from him first authentic information relative to the customs station just established at the lower end of Lake Tagish. A customs collector of the Dominion Government has passed down the lakes and is expected to begin the levy of duties to-morrow on all unbonded American goods passing his station. The following rates are to be charged: On hardware, from 30 to 35 per cent ad valorem; provisions, from 15 to 20 per cent; clothing, from 20 to 25 per cent; tobacco, 50 cents per pound. Miners' blankets, clothing in actual use, and 100 pounds of provisions

will be allowed in free. Apart from these exemptions the duty on ordinary outfits will average about 25 per cent. Still raining, with sharp north wind, and snowing in the mountains.

September 1.—Still raining, with cold wind blowing from the north. Five boats came down from Lindeman to-day. Our boat will be completed to-morrow.

September 2.—Eight boats started down the lake to-day. Weather very favorable, the wind blowing from the south. Rained during the afternoon. Have just learned that the mounted police, by right of eminent domain, made a demand to-day on the proprietors of the saw-mill for its entire output until their boats are completed. This will delay us several days.

September 4.—Rained all day yesterday, but is clear to-day, with south wind. Seven boats passed down Bennett to-day. A very large proportion of those passing down the lake are poorly outfitted, many having less than 500 pounds apiece. About forty men have come down over the Skagway trail with their outfits during the past three days, and report that many more are this side of the summit. Day closed with drizzling rain.

September 5.—Still raining, with a strong north wind, and fifteen or twenty boats are held up, waiting for fair wind. Boat is completed all but the calking, which will be done to-morrow. Price of packing on the Dyea trail has risen to 47 cents a pound, an increase of 9 cents during the past ten days. Ferrymen on the lakes are making from \$250 to \$350 a day apiece. The price of boats has risen to \$500.

September 6.—Boat came over from the sawmill at 7 o'clock in the evening. She is 26 feet in length and 8 feet beam on top, 22 feet in length and 5 feet beam on bottom, and 28 inches deep, and will carry with ease five men and 5,000 pounds. Builder was offered \$800 for her by another party. Start down the lake to-morrow.

September 7.—Started for the north at 7 a. m. Weather delightful, but no wind. Four men at the oars. Reached Division Island, half-way down the lake, at 12 o'clock, and camped for dinner. Got under way at 1.30. Bennett is twenty-six miles long, with an extreme width of five miles. Mountains rise abruptly from the water on either shore, some to a height of 8,000 feet. There are twelve boats in sight, forming a procession five or six miles long. At 2.30 a stiff breeze sprung up from the south, the 10 by 12 tent was hoisted as a sail, and at 6.30 p. m. the boat entered the outlet of the lake, and a camp was made for the night at Caribou Crossing, which received its name from the fact that the barren-land caribou cross here in their migration south in the fall and return in the spring. A flock of 950 head of sheep here awaiting the construction of scows to transport them to Dawson. Two double-decked scows, 18 by 40 feet, are being built. The sheep were driven in over the Dyea trail. The start was made with 1,000 head, and they reached Lindeman in six days. After

grazing a few days at Lindeman, they were driven down the east bank of Lindeman and Bennett to this point, the journey occupying six days, and forty head being lost en route. Sixteen men are employed, and there are about twenty head of horses in use.

September 8.—Left Caribou Crossing at 7.30 a. m., and within an hour were well into Lake Tagish. Windy Arm comes into the lake from the south, about three miles from Caribou Crossing. Opposite the mouth of Windy Arm are three islands, and the arm itself is inclosed by high mountains covered with snow, now burnished by the sunshine to a dazzling brilliancy. The guidebooks state that a strong wind is always blowing through Windy Arm, but it is not blowing this morning, and the oars are in use. Boats should keep to the right-hand side until the arm is passed. The eastern shore of Tagish is bordered by high mountains of limestone, and on the western shore there is a wide stretch of well-timbered lowlands, rising to a range of high hills seven or eight miles from the lake. Camped for dinner at 1 p. m. on the west shore, about ten miles from Caribou Crossing. Went into the woods to look for signs of game. Many moose and wolf tracks were found, but they are three or four weeks old, indicating that we are too late for fresh meat. Got under way at 2 o'clock. Good breeze sprang up from the south at 3 o'clock, sail was hoisted, and at 6 came in sight of the Union Jack of the customs station at the foot of the lake. Made landing at station at 7 o'clock. Found seven or eight boats tied up here, undergoing inspection. Courteously received by the collector. Station opened for business September 1, receipts up to date averaging \$1,200 per day. Collector stated that he was making it as light on the boys as his instructions would permit, and that, while the duty on some articles was pretty high, he was happy to say that there was nothing in his schedule quite as oppressive as the \$30 duty being charged by the United States collector at Skagway on broken-down Canadian cayuses. Proceeded down the river about a mile and camped for the night in a beautiful piece of woodland. Pitched tent alongside that of a party of Black Hills miners. They completed their transaction with the customs officials two hours ago, and are still talking about it. They were required to pay \$80 on a two-ton outfit.

September 9.—Broke camp at 8 a. m. Lake Tagish and Marsh Lake are connected by a broad stream, with slow current, known as Six Mile River. There are lowlands on either side, covered with a growth of cottonwood and white spruce. At 8.40 passed Tagish Houses, a collection of log houses on the right-hand bank of the river. The Indians hold their annual festivals here, and have a burying ground and crematory at the upper end of the village. Entered Marsh Lake at 9 a. m., under full sail in a stiff breeze. The lake is twenty miles long, with an average breadth of two miles, and is very shallow, being bordered by low, marshy lands, from which it derives its name. Had a five-mile breeze the entire length of the lake, arriving at the foot at 1.15 p. m. Weather

delightful, like an October day on Minnetonka or Lake George. Six or seven miles below Marsh Lake high-cut banks are encountered, in many places from 50 to 100 feet in height. The faces of the banks are honey-combed by millions of holes, which are the homes of bank swallows during the summer, but are now deserted. Camped at 3.30, on account of heavy rain, about ten miles below Marsh Lake. Party of six Colorado miners, with two boats and five tons of provisions, landed at 5 o'clock and camped for the night. Report that they were required to pay \$115 in duties at Tagish, and as the high rate of packing on the trail had made their funds run low they were obliged to part with a portion of their flour and other supplies to appease the collector. This unexpected and therefore unprepared-for levy is working great hardship, and is productive of many decidedly one-sided tariff discussions.

September 10.—Started at 7.15 a. m. Fifteen miles to the Grand Canyon. Some nervousness aboard. Weather delightfully cool and air exhilarating. Easy to imagine we are floating down the Hudson on a bright October day. High-cut banks on either shore. River from three to four hundred feet wide and very deep, with a three-mile current.

10.30 a. m.—The current has increased to five miles an hour, with frequent riffles. One of the party, who has been down the river before, says that it is only three miles to the canyon. River narrow and deep, and current increasing.

11.00 a. m.—A board nailed to a tree and displaying the word "Stop!" indicates that we are approaching the canyon. Boat keeps close to the right-hand bank here.

11.12 a. m.—The canyon is in sight, a quarter of a mile away. The river just above the entrance to the canyon, which suggests the Gateway to the Garden of the Gods, is six or seven hundred feet wide and presents the appearance of an immense milldam. There is an eddy on the right, where half a dozen boats are moored to the shore for the purpose of making the portage. With one man at the helm and two oars working, the boat swung far out to the left and entered the canyon straight down the center, riding the crest of the rapids like a duck. Held watch and timed the passage through the canyon, the distance of three-quarters of a mile being made in 3 minutes and 20 seconds, indicating a current of about thirteen miles an hour. Shot the rapids below the canyon and landed on left bank, just above the White Horse Rapids, for dinner. The canyon, which is from 60 to 100 feet in width, is formed by perpendicular walls of basaltic rock from 50 to 100 feet high. About half way through there is a whirlpool about 100 feet in diameter, and it is necessary to keep at work on the oars to prevent the boat from being caught in the circling waters. There is a skidway to the right of the canyon, and many transport their boats and cargoes over this portage of one mile in preference to shooting the canyon. There are about twenty boats and perhaps one hundred

people at the canyon and the rapids, making the portage. Took the opportunity during the dinner hour to walk down to the head of the White Horse Rapids, two miles below the canyon. The river makes an abrupt turn right at the head of the rapids, making it difficult to strike the crest. Anyone who is ambitious to shoot the rapids, except as steersman, is advised to forego inspection of them in advance, as the sight in most cases results in a decision to make the portage instead. The rapids are about half a mile long, and the immense volume of water, with swirling and high-breaking waves, sweeps down the incline at a speed of fifteen miles an hour. The river, which is 300 feet wide at the head of the rapids, contracts to forty at the foot, where the confined waters rush through the narrow gateway with foam-crowned turbulence and then sweep on with a seven-mile current for a few hundred yards, finally resuming their placid course. There is a short portage at the rapids and a skidway for boats, which are used by most voyagers, but very few attempting to shoot the rapids with full cargo. At the head of the rapids scores of trees have been denuded of their bark and the trunks covered with hundreds of names of those who have passed down the river, many inscriptions five or six years old being still decipherable. Notices on the bulletin board indicate that from six to fifteen boats per day have shot the rapids during the past ten days. There has been but one accident in that time, and that was in the case of a boat which the timid owners attempted to let down through the rapids by means of ropes, the boat being dashed to pieces on the rocks. Several graves at the rapids. There are a number of experienced river men here engaged in taking boats through the canyon and the rapids, their charge for services being \$25 per boat. On the bulletin board was a notice, signed by a party of five men from San Francisco, to the effect that they had shot the rapids the day before without portaging a pound of cargo, accompanied by the statement that theirs was the only boat out of thirteen that had accomplished the feat. This party had landed below the rapids and sent one of their number back to post the notice. Our steersman read the notice and wrote immediately below it, "We did the same September 10," signing the names of our party. Started through the rapids at 1.07 and shot them successfully, shipping only about a barrel of water and passing down the river without stopping. Camped for the night at the mouth of the Tahkeena, sixteen miles below the White Horse Rapids. The Tahkeena, which comes from the west, is about half as large as the Lewes and has a sluggish current at its mouth.

September 11.—Left camp at 7.30 a. m. Beautiful, bright morning. Current about four miles an hour. Reached the head of Lake Lebarge, fourteen miles below the mouth of the Tahkeena, at 10 a. m. A few miles below the Tahkeena the valley becomes very broad and the river breaks into many channels, with sluggish current. Kept the left-hand channel and entered the lake at 10 a. m. The lake is thirty-one miles

long and seven or eight miles wide at the island, about ten miles from the head, having an average width of about five miles. Its elevation above sea level is about 2,100 feet. Along the eastern shore, for a distance of six or eight miles from the upper end of the lake, there are gently sloping uplands, covered with timber and terminating in bald hills of a height of a thousand feet or more, forming the foothills of a high range of mountains running parallel with the lake. Farther down the lake limestone bluffs rise abruptly from the water's edge and become high mountains in the distance. On the west shore the hills are generally well wooded. Lebarge is frequently swept by strong winds for days at a time, and when the wind is from the north it is often an impossibility to get down the lake. It is the rule to follow the west shore to the island, as it is difficult to make a landing on the east shore in case of a squall. To the island had a fair south wind, which increased to a seven-mile breeze about 2 p. m., and at 5.30 the boat entered the outlet at the northeast corner of the lake. Camped at 7 o'clock on the west bank of the river, about six miles below the lake.

September 12.—This being Sunday, we decided to take a rest. Three of the party went into the mountains to the westward to look for moose. Returned at noon and reported many signs of large game, but two or three weeks old. A number of beautiful lakes were found five or six miles from the river, lying high in the hills. United States mail carrier passed up during the morning. Reports rich strike on Stewart River, prospects running as high as \$72 to the pan. Brings first news we have had from the Klondike, stating that there is a shortage of provisions and that no new strikes have been made in the Klondike district. Carrier is traveling by the only means of getting out of the country by this route at this time of year—a poling boat, which is eighteen feet long and two and a half feet wide. The boat is propelled by means of a twelve-foot pole, it being necessary to keep in close to shore to avoid the swift current and get good bottom. A good poler can make about a mile an hour in the main river, but by taking advantage of sloughs and cut-offs can average from fifteen to twenty miles a day.

Broke camp at 1 p. m. Bright, warm day, with an exhilarating atmosphere. Current, which is about three miles an hour just this side of Lebarge, gradually increases to five or six miles. Quite a number of bad rocks in the river from ten to fifteen miles below the lake, and ten miles farther down there are rapids with an eight-mile current. Passed the mouth of the Hootalinqua or Teslin River, about thirty miles below Lebarge, at 5 o'clock. This river enters the Lewes from the southeast, and seems to be somewhat smaller than the Lewes. Camped at 6 o'clock about ten miles below the Hootalinqua.

September 13.—Started at 6.50 a. m. Ice formed in water bucket to a thickness of half an inch, and light fall of snow, barely covering the ground, during the night. Sharp wind blowing from the north. Cur-

rent four or five miles an hour. Passed the Big Salmon River, which comes into the Lewes from the east, at 11 a. m. Many flocks of cranes, barely visible as orderly changing lines of black far up the sky, are passing to the southward. Camped for the night about thirty miles below the Big Salmon.

September 14.—Ice formed to a thickness of three-quarters of an inch in the water bucket during the night, and there is film of ice on the sloughs. Beautiful sunny morning. Broke camp at 6.50. Passed Little Salmon River, which enters the Lewes from the east, at 7.50. For many miles below the Little Salmon the river is narrow and deep, being confined by high, wooded hills and having a four or five mile current. Landed at 1.15 p. m. at George W. Cormack's deserted trading post, located on the left bank, about forty miles below the Little Salmon. On this side of the river there is a table-land several hundred acres in extent, covered with bunch grass and a growth of scrubby fir; larch, willows, etc., and on the east side there are high rolling hills, partially wooded and becoming mountains farther to the eastward. The deserted store is a well-built cabin, about 16 by 24 feet in size. There are but two articles of furniture in the cabin—a large heating stove made of a coal-oil tank, and a pine table, minus one leg and occupying a semirecumbent position in a corner of the room.

Since 9 o'clock a cold north wind has been blowing, and the place is desolate beyond description. Stopped at 3.30 and ascended a high mountain on the right bank to a height of seven or eight hundred feet. The hillsides are covered with a luxuriant growth of bunch grass and wild oats, and thousands of grasshoppers wing their halting flight in the brilliant sunshine. A magnificent view of the surrounding country is here obtained. The river, six or seven hundred feet wide, sweeps with a five-mile current two miles to the northward and disappears round a high wooded mountain, while to the westward range beyond range of mountains, many covered with snow, fade to the horizon, a hundred miles away—10,000 square miles of forest-clad hills and intervening vales where the foot of a white man has never trod. Camped on the west bank, at the head of Five Finger Rapids, at 5 o'clock. These rapids are very swift, but short. There are three principal channels, divided by basaltic columns from twenty-five to forty feet in height. The right-hand and middle channels are generally chosen by boatmen. There is but little danger, if boat is kept to center of channel, although a number of boats have been swamped here.

September 15.—Very cold during the night, temperature falling to 24 degrees and ice forming to a thickness of an inch. Broke camp at 7 a. m., and shot the middle channel. Two miles below the rapids the old Dalton trail strikes the river. A signboard displays the words: "Dalton Trail; 250 miles to Chilkat." This trail has been abandoned for the new Dalton trail, which strikes the river at Fort Selkirk, about fifty-five miles below. A herd of sixty-four head of beef cattle are grazing

here, awaiting cold weather, when they will be butchered and taken to Dawson on rafts. Shot Rink Rapids, six miles below Five Fingers, at 8.45 a. m. Boat keeps to the right, where there is no danger, as the channel is wide and deep. Thirty miles below Rink Rapids passed party with three large rafts, which are being taken to Fort Selkirk for the purpose of transporting beef to Dawson. It was necessary to come this far up to get good logs. At the mouth of the Pelly, five miles above Fort Selkirk, hail two miners poling up the river. Their only reply is: "If you haven't plenty of grub, you had better turn back." Landed at Fort Selkirk, which is located on the west bank of the river, fifty-five miles below Five Fingers and 160 miles above Dawson, at 3.30 p. m.

There is a trading post here conducted by Harper & Ladue, and they have a number of good buildings. There is a large vegetable garden here, and about 150 head of cabbage are maturing in the open air. Between fifty and sixty bushels of potatoes were raised during the season. The Church of England has a fine mission here, but it is now deserted on account of the lack of supplies. There is quite a large Indian village at the upper end of the settlement. On the door of the store is the following notice: "Parties contemplating going out this season take notice that no provisions of any kind can be obtained here, except, possibly, a little moose meat, and dog salmon in small quantities for dog feed. No freight steamer has been here for two years. No flour can be had." Inside the shelves are barren, and the trader appeals to everyone coming down the river for a little flour and sugar. All the Indians, and even the post trader, have a lean and hungry look, and there is a world of pathos in the simple remark of the latter, "I don't know how we are going to get through the winter." A register is kept at the store of those passing down the river. There are 1,876 names on the register to-day, and about 500 have been counted who passed without landing, making a total of about 2,400 who have gone to the new gold fields by this route during the present season. Met three or four polers from the Klondike here, on their way to Dyea. One of them, a miner, who has been eight days in making the 160 miles from Dawson, displayed drafts amounting to \$32,000, the result of eight months' work. States that he would have spent the winter on his claim, but that he was obliged to get out on account of the scarcity of provisions, leaving his partner in charge with their scanty stores. Jack Dalton has sixty-four head of cattle here, and Cameron, Franklin & Heaney have sixty head. Waiting for cold weather before butchering, and will then take beef to Dawson on rafts. They are selling beef for 50 cents per pound by the quarter. There are thousands of acres of good grazing land in this vicinity. Old Fort Selkirk, which was located across the river, two or three miles above the present post, was burned by the Indians in 1852, and the ruins of the chimneys can still be seen. It was one of the principal posts of the Hudson Bay Company in this region. Remained all night at the trading post.

September 16.—Broke camp at 6 a. m. We are now in the Yukon proper. It is about half a mile wide and very deep, with current of four miles an hour. Three miles below Fort Selkirk passed a flock of 600 sheep, which are grazing on the lowlands on the west bank of the river. Rafts are now being constructed for their transportation below. Owner hailed our boat and offered \$15 a day and board to two men to assist him. Boys all declined, as they are seeking gold in the abstract rather than the concrete. On the east side of the river, extending for eight miles below the mouth of the Pelly, is a basaltic plateau, supposed to have come from a volcano twenty or thirty miles up the Pelly. It has a perpendicular front, five or six hundred feet in height, and is known as the Upper Ramparts. Passed several parties getting out logs for building purposes. Camped for the night at 5.30, about fifty miles below Fort Selkirk.

September 17.—Left camp at 7.15 a. m. Weather still delightfully bright and pleasant. Passed the mouth of White River at 12.30. White River, which comes into the Yukon from the west about ninety miles below Fort Selkirk, is a large stream, having a very swift current, and discharging into the Yukon an immense volume of water containing a white substance, supposed to be volcanic ash, that discolors the main stream for a long distance. Below the White River the Yukon breaks up into numerous channels, and there are many islands and sandbars. Looks here like the Missouri between Atchison and Leavenworth. Reached the mouth of Stewart River, ten miles below White River, at 3.10. Stewart River flows into the Yukon from the east, and is a broad, sluggish stream at its mouth. Quite a number of people from upriver have stopped here to get out house logs, as it is reported that they are selling for \$300 a set in Dawson and are hard to find lower down. Several prospectors here, just returned from the Stewart River country. They report that nothing has been struck during the season on that stream or its tributaries. Mail carrier was evidently misinformed or unreliable. The *Koukuk*, a 10-ton stern-wheel steamboat, is tied up here. She has been three days in coming from Dawson, about seventy miles below. Has a half ton of flour and other provisions for Fort Selkirk, and the captain expects to reach that point in a week. If the *Koukuk* is a representative type of the Yukon steamboat, it would take no prophet to predict a famine. Captain offered \$10 a day and board for men to make the trip to Fort Selkirk and return, but could find no one willing to work on those terms. He draws a gloomy picture of affairs at Dawson, stating that there have been no new strikes and that the country is filling up with people half provided with food supplies. Camped at 6 o'clock on the east bank of the river, about six miles below the mouth of the Stewart.

September 22.—Left camp at 8.15 a. m. Party has been getting out house logs for the past four days. Reached Sixty Mile Post, twenty-one miles below Stewart River, at 10.30, and stopped for a few minutes. The post is on the east side of the river, opposite the mouth of Sixty

Mile River, which comes into the Yukon from the west. There are some good placer creeks on the head of Sixty Mile, and about one hundred miners have been accustomed to winter here. Harper & Ladue own the trading post, which is now deserted on account of the Klondike excitement, being in charge of an Indian. The sawmill, which was formerly located here, is now in operation at Dawson. There is a fine vegetable garden here, and large cabbages have been raised during the season, while about 150 bushels of potatoes were raised and found a ready sale at Dawson for \$1 per pound. Camped for the night at 6 o'clock, about thirty miles below Sixty Mile.

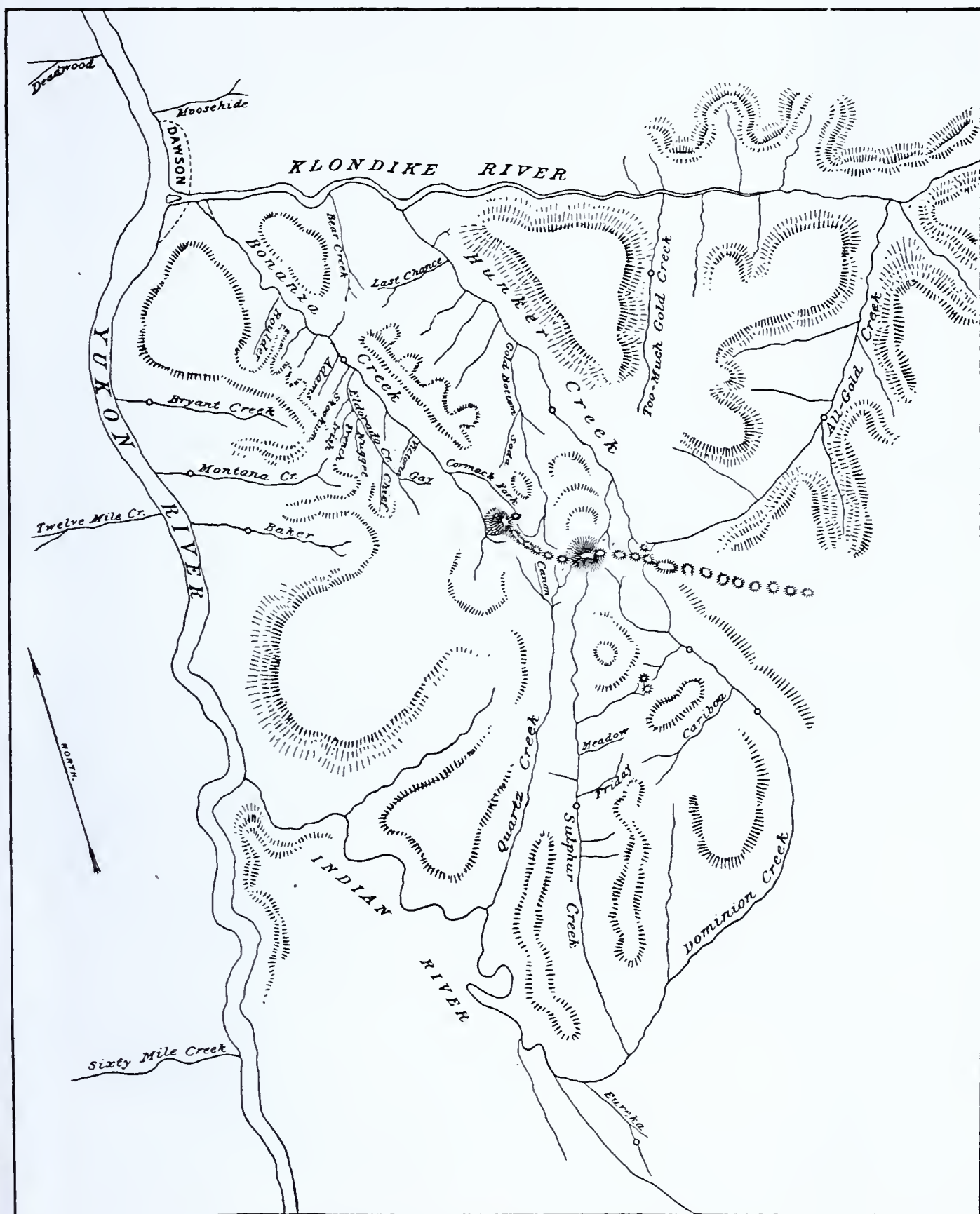
September 23.—Left camp at 8 a. m., and arrived in Dawson at 11 a. m. Landed at the upper end of town, which is located in a swamp and oppressively crude.

THE KLONDIKE.

The Klondike River enters the Yukon from the southeast, six miles above old Fort Reliance. It is about 150 miles long, and has its source in a high range of mountains which separates it from the Stewart River and its tributaries. At its mouth an island divides the stream into two nearly equal channels, each of which is about 150 feet wide and four or five feet deep, at a medium stage of water. The stream is very swift, and rapids occur at frequent intervals, making it exceedingly difficult to navigate with canoes. Its waters are clear and shallow. It has been known for many years as one of the best streams in the country for salmon fishing, and during the season large numbers of Indians camp on its shores for the purpose of catching and drying salmon. For several years gold has been known to exist on the main stream, but it has never been found there in sufficient quantities to justify working under present conditions as to cost of supplies.

The original discovery of gold in paying quantities in the Klondike district was made by George W. Cormack, who came to the Yukon country twelve years ago from Wisconsin, and who had been engaged in prospecting and in trading with the Indians and miners at various points on the river. On June 22, 1896, Cormack and Loren Cooper left Forty Mile for the mouth of the Klondike. It was Cormack's intention to spend the summer in fishing on the Klondike, while Cooper proposed to develop two quartz leads situated just below the mouth of that stream on the west side of the Yukon, and directly opposite the present site of Dawson. They were thus engaged in the early part of August, when Robert Henderson, an oldtime prospector, came down the Klondike and told Cormack that he had found on the headwaters of Gold Bottom Creek some ground that would pay 15 cents to the pan.

Cormack accompanied Henderson to Gold Bottom, but not being favorably impressed with the prospects, returned alone to the mouth of the Klondike, coming down the creek now known as Bonanza. On



KLONDIKE MINING DISTRICT, NORTHWEST TERRITORY.

his way back he prospected on various tributaries of Bonanza, and on the main creek itself, and, finally, at a point about twelve miles above the mouth, he found gold in sufficient quantities to justify him in locating, and on August 17, 1896, he staked two claims, as he was allowed to do under the law—one now known as "Discovery" and the other as "No. 1 below Discovery"—and gave to the creek the name it now bears. From Discovery down to the mouth of the creek he found fair prospects at various points on the bars and in the rims, panning out altogether \$5 or \$6 in coarse gold, the largest nugget weighing \$1.10. Cormack informed Cooper and others of his discovery, and left on August 19 for Forty Mile for the purpose of recording his claims, which he did on August 26, 1896. Cooper, Edward Monahan, and Gregg Stewart staked on the 19th, locating the claims now known as 27, 28, and 29 below Discovery. William Stanton, on the 21st, staked what is now known as 13 below. In the meantime the news of the discovery had spread to Indian Creek, which flows into the Yukon from the eastward thirty miles above the Klondike, and fifteen or twenty men who were prospecting there left at once for the new diggings, while quite a number of men who were coming down the river in small boats were informed of the discovery and stopped to make locations. Three or four days after Cormack's arrival at Forty Mile a large number of men came up from that place in poling boats, and by September 1 there were 150 or 200 men on Bonanza and its tributaries seeking claims. By September 13 Bonanza had been staked to 45 above and 90 below Discovery, and as nothing of value could be found above or below those numbers many men were forced to prospect on other creeks. On the date named a discovery was made at the mouth of the gulch now known as Eldorado Creek, which comes into Bonanza from the south about a mile above Discovery, and in three or four days Eldorado was staked to 32. This creek, which was staked because there was no other ground in the immediate vicinity to be had, and which was not supposed to contain anything of special value, has proved to be far richer, though less extensive, than Bonanza, and is probably the richest creek, mile for mile, ever discovered in the world. In October about twenty men came up from Circle City on the steamer *Arctic*, and by April 1, 1897, some 800 had come up from that place, making the population of the Klondike district at the last-named date about 1,500. All who came into the district during the winter were compelled to bring their own supplies, as no freight was landed there by the commercial companies until early in the following June. A large proportion of the miners and prospectors lived in tents, only about thirty cabins being built on the gulches during the winter.

Up to November 3, 1896, no great strike had been made on either creek, but on that date rich ground was opened up on 21 above Discovery, on Bonanza. The first pan taken out immediately below the muck yielded 35 cents, and the next seven fires gave an average of \$3.35 to the pan. From this strike dates the "boom" on the Klondike. At that time

Eldorado had shown no large prospects, but a few days later very rich ground was opened up on 14 and 15, as high as \$18 being taken from a single pan. During the same month a big strike was made on 6, which yielded as high as \$22 to the pan.

On Hunker Creek gold was discovered in September, 1896. This creek has developed some good properties, and in October, one month later, claims there were worth more than on Bonanza and Eldorado.

During the early part of the winter but little work was done on the gulches beyond the sinking of prospect shafts by the claim owners themselves, as it was impossible to induce men to work for wages. Every man who had an outfit believed that he could do better by taking his chances of finding a good claim than by working for the wages offered (\$15 a day), and a large number of men spent the fall and the early part of the winter in prospecting the tributaries of the Klondike and Indian rivers and numerous gulches along Bonanza and Eldorado creeks. By the middle of January (1897) many of these prospectors had become discouraged through failure to find good claims and took "lays" (*a*) on Bonanza and Eldorado, and later a large number accepted employment for wages, principally on Eldorado. Drifting was prosecuted vigorously until the water began to run in the creeks, about May 7, when the work of shoveling the dumps into the sluice boxes was begun. Most of the dumps were exhausted within thirty days and many marvelous clean-ups made. On some claims the gold filled the riffles so rapidly that it was necessary, in order to save the gold, to clean up as often as twice a day. On 2 Eldorado, with four men shoveling in, \$6,500 was taken out in one day. By the first week in June the winter's work was practically closed, and five months' active mining operations, conducted by a force of about 600 men, had produced an amount of gold which is conservatively estimated at \$2,000,000. Work was continued through the summer on most of the claims, ground sluicing and shoveling in being actively engaged in on Bonanza until the creek froze up in the latter part of September, and on Eldorado until the latter part of August, when the water got too low to furnish a sluice head. The output for the summer brought the total product for the season up to about \$3,000,000. Much "dead work" was done, consisting of removing the trees, stumps, moss, and muck, and in ground sluicing and otherwise getting ready for active operations the following season.

On September 30, 1897, Bonanza Creek had been staked above and below Discovery for a total distance of about twenty miles, while Eldorado Creek had been staked for a distance of about eight and a half miles, both being located for almost their entire length. These are all

a "Lay" is the term used by the miners to designate ground worked on shares. A lay usually consists of a strip fifty or one hundred feet in width, intersecting the general course of the stream at right angles and extending clear across the claim. The usual terms are an equal division of the output, the lessor paying all expenses of operation.

creek claims, 500 feet long, as a rule, measured in the direction of the general course of the stream, and extending in width from base to base of the hill or bench on each side. In making their original locations prospectors who were not provided with tapelines stepped off the distance and set their stakes at what they considered the limits of their ground. When the Government survey was made it was often found that more ground was claimed than the locators were entitled to, and thus "fractions" were created. There are quite a number of these on the various creeks, and some of them have proved very rich. At the above date there were also fifty bench claims on Bonanza and forty on Eldorado. The bench claims are 100 feet square and can not extend below the "base of the hill or bench." The Canadian mining regulations are not clear as to the line of demarcation between creek and bench claims, and as a consequence some dispute has arisen as to where the creek claims cease and the bench claims begin; but these disputes are generally amicably settled between the parties themselves.

The method of placer mining pursued in the Klondike district is somewhat different from that which prevails in the United States. The ground, which is covered with moss to a depth of from twelve to eighteen inches, is frozen solid from just below the moss to bed rock, which is generally struck at a depth of ten or fifteen feet, although in many places it is twenty-five or thirty feet below the surface. The heat of the sun, even in the hottest days of summer, when the thermometer registers 100 degrees in the shade, has no effect on the frozen ground until the moss is removed. Beneath the moss there is a deposit of decayed vegetation called by the miners "muck," which varies from two to twenty feet in depth.

Where the ground is very deep it is found more economical to sink a shaft to bed rock and take out the pay gravel by means of a windlass. This is called "drifting," and in many claims this can be done successfully only in the winter time, after the stream is frozen solid, as in the summer time the inflow of surface water and seepage from the creeks make it impossible to pursue this method. After stripping off the moss, the miner starts a shaft about three and a half by six feet, picking through the muck until the gravel is reached. He is then obliged to resort to "burning," as the best pick does not hold its point five minutes when used in the frozen gravel. A fire of cord wood is built on the bottom of the shaft, which thaws the gravel to a depth of about two feet. This thawed gravel is then shoveled out or hoisted by means of a windlass, and the process repeated until bed rock is reached. At this stage the "drifting" proper begins. Dry wood is piled against the wall of the shaft to nearly the height of the pay gravel and covered with sticks of green cord wood arranged with one end resting on the bottom of the shaft and the other leaning against the wall at an angle of 45 degrees. The green wood so placed is called "lagging," and serves the double purpose of confining the fire and catching the waste

dirt from above. At bedtime the fire is started and the miner retires for the night. During the night the heat causes the wall to cave, and the gravel which slides down over the lagging produces a smouldering fire, which burns till morning and thaws the face of the gravel to a depth of two feet or more. In the morning the miner enters the shaft, throws back the waste dirt and charred wood, and hoists the pay gravel to the surface. This process is repeated daily, the miner panning after each fire to see if he is still on the pay streak. As the work progresses the drift gradually widens out until a width of about thirty feet is attained, and is then carried forward at a uniform width. On account of the gas produced by the burning wood, ventilation is necessary, and this is secured by sinking a second shaft at a distance of twenty or thirty feet from the first and connecting them as quickly as possible. On account of the frozen condition of the ground, timbering is unnecessary, but the expense thus saved is more than counterbalanced by the consumption of firewood in burning. On many of the claims on Bonanza and Eldorado the wood has been cut off to the top of the range on either side, and within a year or two wood will have to be brought from a distance, which will greatly increase its cost. In the spring the dump taken from the drifts is shoveled into sluice boxes and the gold thus separated from the gravel.

In the shallower claims ground sluicing is resorted to during the summer months. When the pay streak has been located the moss is stripped off, a trench is dug parallel with the creek along the pay streak, and the water from the creek is turned into the head of the trench by means of a wing dam. The action of the water in passing through the trench undermines the banks and washes the muck and much of the gravel into the bed of the creek below, the coarse gold in the gravel thus carried away being left in the bottom of the trench. After the trench has been washed out to a sufficient width a line of sluice boxes is set through the center of the trench, a head of water turned on, and the gravel shoveled in from either side. The sluice boxes are given enough fall to carry the gravel and sand through the boxes into the "tailings" pit below, the gold dropping to the bottom and lodging in the riffles, which consist of longitudinal strips arranged about an inch apart and having cross strips at frequent intervals. Some of the ground, especially on Eldorado, is so shallow that it is found profitable, after removing the moss, to shovel it all into the sluice boxes, thus avoiding the expense and delay of drifting and ground sluicing.

The following details relative to the output of the claims on Bonanza and Eldorado, the number of men employed, wages, etc., present a fairly accurate idea of the value and productiveness of the mines:

BONANZA CREEK.

Discovery and 1 below were well opened up last winter (1896-97), and a pay streak from 30 to 100 feet wide was located. The ground yields

from \$2,000 to \$2,500 to the box length (*a*), and \$40,000 was cleaned up in May as the result of the season's work, eight men being employed.

All the claims from 2 to 10 below run about the same as Discovery and 1 below, there being very rich spots on 3, as high as \$3,000 to the box length having been taken out last spring. About ten men were employed for wages on these claims.

From 10 to 20 below, the ground is very rich, producing in places \$4,000 to the box length, and the pay streak is 600 feet wide on several of the claims, having been located for a width of 700 feet on 16, with fair pay all the way across.

From 20 to 30 below, the pay streak is very wide, and the ground runs \$2,500 to the box length.

In the 30's very little has been done, the output not amounting to over \$10,000, probably. As high as \$2,000 to the box length has been taken out, and the claims promise large returns.

The 40's run about the same as the 30's, but very little work has been done.

From 50 to 59 the ground yields from \$1,500 to \$2,000 to the box length. In places the pay streak is 600 feet wide, and the yield is likely to be large. No. 51 produced \$50,000 or \$60,000 during the summer, ground sluicing, employing twelve men.

In the 60's good pay was taken out last winter. No. 60 was bought for \$10,000, and afterwards a half interest was sold for \$10,000, the seller reserving the dump and washing out \$4,500 therefrom. The ground ran about \$2,000 to the box length.

The claims above Discovery run about the same as those below. From 1 to 18 above the ground runs about \$2,000 to the box length. No. 5 produced \$49,000 during the season, two box lengths yielding \$16,000. A half interest in this claim was sold last October for \$35,000 cash. Some sixty-five men were employed on 5 at one time during the summer.

No. 21 above is one of the best claims on Bonanza, running as high as \$4,000 to the box length. The first rich strike on Bonanza was made on this claim.

From 21 to 26 above very little has been done.

On 26 some big clean-ups were made, over \$100,000 having been taken out last summer by ground sluicing. A half interest in this claim was bought last winter for \$40,000, including a half interest in 18 above and a quarter interest in 34 Eldorado.

No. 27 sold for \$55,000 last spring, the purchaser taking out enough in two months to pay for the claim. The entire output for the season

a The sluice boxes in use in the Klondike district are constructed of inch lumber, and are twelve feet long and twelve inches deep, being twelve inches wide at one end and ten inches wide at the other, so as to fit into one another. In running a string of sluices the gravel is shoveled in from either side to a width of six or seven feet, making a cut about fourteen feet wide. A box length, therefore, is a superficial area twelve by fourteen feet, or 168 square feet.

was \$75,000. No. 28 belongs to the same parties as 27 and is equally rich.

No. 29 has turned out from \$3,000 to \$4,000 to the box length.

No. 36 has been very productive, and 37 produced last winter between \$45,000 and \$50,000.

No. 38 has turned out very well, as high as \$3,000 to the box length, and yielded about \$20,000 as the result of the season's work.

From 39 to 44 the ground is good, 41 having produced \$20,000 the past season. Very little has been accomplished above 44. In the 50's there has been considerable prospecting, but nothing has been found to justify working at the present rate of wages and cost of supplies.

The bench claims on Bonanza from the mouth of Eldorado, which comes in about a mile above Discovery, to 60 below have shown up well, some of them being very rich. From a bench claim at the mouth of Skookum Gulch, which enters Bonanza about half a mile below Eldorado and nearly parallel with the latter stream, one man washed out \$500 a day with a rocker for a short time during the past summer. Along the upper end of 6 below three or four of the bench claims are very rich, one man having rocked out \$10,000 last summer. He was offered \$10,000 for his claim when he ceased work, but refused the offer. Between Eldorado Creek and Skookum Gulch there is a divide two or three hundred feet high, and pay has been found all the way to the top on both slopes. On the summit washed gravel is found, producing \$1 to the pan in coarse gold. The deposit has all the characteristics of an ancient river bed, and has been traced along the ridge for several miles. It is supposed to extend around the head of Eldorado and over to the head of Dominion Creek, where very rich ground was discovered during the past fall. There are many evidences that the wash which produced the present rich deposits of gold in the Klondike district came from this ancient river bed.

All sales so far reported on Bonanza have been made between miners, the money for the payments being borrowed by them from one another. The largest price that has been paid for a single claim on Bonanza is \$55,000. No. 7 above was originally purchased for \$7,000, and a quarter interest was afterwards sold for the same amount, or at the rate of \$28,000 for the claim. A half interest in 6 above was sold for \$10,000 early last spring. Many other sales are reported, but these are typical.

ELDORADO CREEK.

The fraction at the mouth of Eldorado is very rich, the dump taken out during the winter having produced \$25,000. Five men were employed in making this output.

No. 1 produced \$19,000 as the result of the winter's drifting. The work was begun in February, four men being employed. The claim produced \$30,000 during the summer, employing fourteen men.

Fourteen men, drifting from February to May on 2 Eldorado, took out a dump which yielded \$100,000. Four men working on a lay on the same claim took out \$49,000, being employed from January 27 to May 1, and two other men working on a lay produced \$32,000, being employed about the same length of time.

Nothing has yet been found on 3, although it is supposed to be rich.

From the fraction of 140 feet between 3 and 4 about \$4,000 was taken out, two men being employed on a lay. The claim sold for \$14,000 last February.

No prospecting has been done on 4, but it is probably as rich as the claims immediately above and below.

The upper part of 5 and the lower part of 6 produced about \$130,000, the result of drifting last winter, sixteen or eighteen men being employed, beginning work late in February. During the summer \$50,000 was taken out, twelve men being employed. The pay streak is fully 300 feet wide here, extending clear across the gulch.

On 7 five men were employed for a short time, and they took out \$31,000 in four box lengths.

The pay streak is 300 feet wide on 8, and with fifteen men working produced \$100,000.

No. 9 is very rich, and produced between \$70,000 and \$100,000 from two holes, employing nine men. Some very large pans were taken out of this ground, as high as \$212 being reported. From three buckets of gravel (fifteen pans) \$1,500 was secured.

No. 10, a half interest in which was sold last winter for \$15,000, yielded \$20,000 as the result of drifting last winter, and \$30,000 was taken out during the summer, three men being employed.

A clean-up of \$26,000 was made on 11, and from two cuts \$60,000 was taken out by five men. The pay streak is wide here.

No. 12 produced about \$35,000. This ground is very rich. A great deal of dead work was done on it during the summer in preparation for this season's work.

No. 13 has been very productive, probably \$100,000 having been taken out, with six men employed.

Nos. 14 and 15 produced about \$120,000, drifting, with two or three men employed.

Six men, drifting, took out \$80,000 on 16.

No. 17 has shown good results, having produced nearly \$100,000. Work was begun in February, nine men being employed.

From 18 to 23 not much has been accomplished, although all the claims show good prospects.

No. 23 was bought for \$25,000 last winter, and the purchaser, working six men, took out enough in two months to pay for the claim.

No. 25 has produced about \$30,000, employing five men drifting from February 1 to April 10. Eight box lengths yielded an average of \$2,000 to the box length.

Very little work has been done on 26, although the prospects are good.

From two small dumps on 27 about \$30,000 was taken out, with three men employed.

The fraction of fifty-five feet between 27 and 28 yielded from a small dump between \$6,000 and \$8,000, with three men employed.

Nothing has been accomplished on 28, although it prospects well.

Last summer \$38,000 was taken out of thirty-eight lineal feet on 29, six men being employed. The owner was offered \$120,000 for 120 feet on the upper end, but he refused the offer.

No. 30 is the great claim of Eldorado. It has produced as high as \$20,000 to the box length. About \$150,000 was taken out of two cuts—twelve box lengths in all, or about \$70 to the square foot. The pay streak is forty feet wide. At one time during the spring the owner could go into the workings and take out a pan of dirt from bed rock and get from \$800 to \$1,000 to the pan. Six men were employed on 30 during the winter, drifting, and about thirty men were employed during the summer.

There is a small fraction between 30 and 31, which has yielded about \$30,000. The best pay is found under the banks along here.

The original locator of 31 sold it for \$80, and it was afterwards sold for \$31,000, one of the first big sales made in the district. Eight men were employed on the claim from April until just a little while before the close of the season, when the water became so low that they had to cease work. They uncovered some very rich ground, and it is thought that 31 will prove to be one of the best claims on the creek.

On 32 big prospects have been found, but not much work has been done.

Up to September 29, 1897, nothing had been found on 33, but on that date a strike was made which yielded \$10 to the pan, and the claim promises to be very productive.

No. 34 shows good prospects, but no rich ground has been struck. About nine men were employed on the claim during the summer.

Nothing has been done on 35.

Six men were employed on 36 during the winter, drifting, and from \$4,000 to \$5,000 to the box length was taken out. Some work was done during the summer, and the claim has yielded between \$40,000 and \$50,000. The largest nugget as yet found on the Yukon was taken from 36. It weighed about $34\frac{1}{4}$ ounces and was valued at \$583.

No. 37 shows up about the same as 36, and will probably prove as productive.

The claims on Eldorado above 37 have not shown any very promising prospects at the present writing.

The bench claims on Eldorado were not worked to any extent last winter, and it was difficult to prospect them during the summer on account of the inflow of surface water. But they will be thoroughly

prospected this winter, and it is probable that they will prove very rich, as gold has been found in paying quantities wherever a shaft has been sunk to bed rock.

October 1, 1897, eighteen creeks had been located in the Yukon district of Canada. The following table shows the names of the creeks, the number of claims above and below Discovery, the number of bench claims, and the mining districts in which the creeks are located:

NAMES OF CREEKS, WITH NUMBER OF RECORDED CLAIMS, IN THE YUKON DISTRICT OF CANADA, OCTOBER 1, 1897.

Name of creek.	Above Discovery.	Below Discovery.	Bench.	Mining district.
Last Chance.....	41	7	.....	Klondike.
Bonanza.....	115	68	.....	Do.
Bear.....	24	26	.....	Do.
Eldorado.....	90	.....	40	Do.
Hunker.....	50	87	1	Do.
Victoria.....	20	.....	.....	Do.
French.....	41	.....	.....	Do.
Isaac, or Chief.....	10	.....	.....	Do.
Skookum.....	13	.....	30	Do.
All Gold.....	12	52	.....	Do.
Sulphur.....	72	68	.....	Indian Creek.
Dominion.....	50	75	.....	Do.
Eureka.....	36	35	.....	Do.
Montana.....	35	8	.....	Montana Creek.
Moose Hide.....	38	5	.....	Moose Hide.
Bryant.....	35	11	.....	Bryant Creek.
Deadwood.....	37	28	.....	Deadwood Gulch.
Henderson.....	43	34	.....	Henderson Creek.

In explanation of this table it should be stated that the Canadian mining regulations differ somewhat from the mining laws of the United States in the definition of a "mining district" (or "locality"). Under our laws and local regulations a separate mining district may be established on every creek where a discovery is made; whereas under the Canadian mining regulations, "locality" shall mean the territory along a river (tributary of the Yukon) and its affluents. To illustrate: The Birch Creek district, in Alaska, consists of eighteen or twenty separate mining districts, each having its recorder and records, while the Klondike mining district (or locality) embraces the Klondike River and all of its tributaries, and is subject to the authority of a single official, the gold commissioner, who has jurisdiction over the Yukon district of Canada.

Some complaint is heard of the Canadian mining regulations (*a*) in force in the Yukon district, but it must be said in their behalf that in one respect they are considered more favorable than our own laws to the poor man seeking a claim for the purpose of working it. Under the Canadian law a prospector can locate but one claim in a district (or locality), and as he is required when he records to certify under oath that he has found gold in paying quantities, the effect is to prevent the

a A pamphlet giving the regulations governing placer mining in the Yukon district of Canada may be had free upon application to J. A. Smart, Esq., Deputy Minister of the Interior, Ottawa, Ontario, Canada.

location of creeks before they are properly prospected. This is certainly a provision that gives all a fair chance. Under the United States law (*a*) a prospector can locate any number of claims in a district, if he so desires, provided he is not prohibited from doing so by local mining regulations. It may be added, however, in this connection that in order to hold the possessory right to a location not less than one hundred dollars' worth of labor must be performed or improvements made thereon annually until entry shall have been made.

No remarkable discoveries have been made in the Yukon district aside from those on Bonanza and Eldorado, detailed above.

Skookum Gulch, which enters Bonanza from the south half a mile below Eldorado, is staked to 13 above its mouth, where the original discovery was made, and contains thirty bench claims, some of which are very rich. The creek claim at the mouth of Skookum Gulch was staked last March and was sold shortly afterwards for \$35,000. The purchasers cleaned up \$37,000 during the summer and then sold a half interest for \$35,000. Nothing noteworthy has been accomplished farther up on Skookum, but the ground prospects well and will undoubtedly prove rich, as it drains the western slope of the divide, containing the ancient river bed previously referred to.

French Gulch, a tributary of Eldorado, has not been developed to any extent, although \$5 to the pan has been secured from a fractional claim at its mouth.

Bear Creek, a tributary of the Klondike, contains fifty creek claims, some of which prospect well. One claim which was worked last winter yielded from \$1,500 to \$2,000 to the box length.

Hunker Creek, which flows into the Klondike from the south a few miles above the mouth of Bonanza, has 137 creek claims and one bench claim, and is reported to contain much good property.

No promising prospects have been found on any of the other tributaries of the Klondike. It is a remarkable fact that all the gold-bearing creeks thus far discovered on the Klondike come into that stream from the south, and the same statement is true of Bonanza and Eldorado.

Several creeks have been located outside of the Klondike district, as indicated in the foregoing table, but no noteworthy developments have been made. Dominion Creek, a tributary of Indian River, has shown some very fine prospects, and as it heads just across the divide from the head waters of Eldorado, it is thought that it may prove productive.

Late reports from Henderson Creek, which enters the Yukon from the east just below Stewart River, indicate that good ground has been found there, 35 cents to the pan having been obtained on the benches. It was impossible during the summer to reach bed rock near

a A pamphlet giving the United States mining laws, and regulations thereunder, may be had free upon application to the Commissioner of the General Land Office, Washington, D. C.

the creek on account of the water, but it is probable that good pay will be found there during the winter.

In the short time available it was impossible to interview all the claim owners on Bonanza and Eldorado. The amounts given above as the output of the various claims designated aggregate nearly \$2,000,000, and as most of the claims for which the output is not given (some 125 in number) produced from \$1,000 to \$10,000 each, it is safe to say, as before stated, that the mines of the Klondike district yielded during the season of 1896-97 nearly \$3,000,000—a most extraordinary figure, when it is considered that the period of active operations on most of the claims was less than eight months and that probably less than 600 men were engaged in productive mining operations. The claims on Bonanza were worked almost entirely by the claim owners themselves and by miners who took lays on the claims, and it is probable that not over 100 men were working for wages on the creek at any one time. The claims on Eldorado were worked principally by the claim owners personally and by miners employed by the day, the owners being averse, on account of the extraordinary richness of the ground, to letting it out on lays. The best obtainable data place the number of men working for wages on Eldorado at any one time at 300, and it is probable that one-half of this number would represent the average for the eight-month period of active operations. There is no doubt that the output would have been doubled if it had been possible to secure miners, but, as intimated elsewhere, a man who was supplied with provisions could not be induced to work for wages, and those who did accept employment worked only long enough to earn a “grub stake,” when they ceased work and went into the hills to prospect.

While the output appears large, it should be borne in mind that the expenses of operation are enormous. Sluice-box lumber costs \$150 a thousand feet in Dawson, and the rate for packing to 36 Eldorado, a distance of sixteen miles, is \$80 a thousand, and proportionately more for greater distances. In the summer it costs 35 cents a pound to pack provisions from Dawson to 36 Eldorado, the winter rate being 8 cents a pound.

The summer trail from Dawson to the mines is a mere footpath, which winds its way over a steep mountain for a distance of two and a half miles, where it strikes the Klondike, which is crossed by means of a ferry and then traverses the valley of Bonanza Creek for two or three miles farther. It then alternately ascends and descends benches from one to three hundred feet high and meanders through the valley. Where the trail keeps to the bottom lands one sinks to the knee in the muck at nearly every step, while it is necessary constantly to be on the alert to avoid a bad stumble over the roots, which protrude from the ground and cross the pathway in every direction. Rubber boots are indispensable but their weight adds to the discomfort of the journey. When the trail leaves the bogs and ascends the hillside, some relief is

experienced so far as the muck is concerned, but the roots are still there, supplemented by smooth bowlders, on which one is apt to slip and fall, while the exertion required to climb the steep incline tries the stamina of the strongest man. The unhappy traveler's misery is accentuated to the verge of distraction by myriads of mosquitoes, probably the most energetic and vindictive of their kind thus far discovered on this continent. After a journey over the Bonanza trail the mind reverts to the struggle over Chilkoot Pass as a mere pleasure jaunt and to the soul-harrowing experiences on the Skagway trail as a summer outing. In passing down the trail men are met at frequent intervals carrying from 100 to 150 pounds on their backs and one falls to wondering why, instead of packing for 35 cents a pound, they do not strike for \$1. Horses and dogs are also used for packing, a good horse carrying 200 pounds and a dog from 35 to 50 pounds. In the winter, after the creeks and the Klondike freeze over, provisions are freighted to the mines by means of sleds, drawn by horses, dogs, or men, and the rate is about one-fourth that for summer packing. These rates, added to the excessive prices paid for supplies in Dawson, make the cost of living and the expense of operating the mines enormous.

If a visitor to the gulches prefers to ride, he can secure a saddle-horse in Dawson for \$60 a day.

During the past summer thirty or forty well-constructed log buildings were erected on the north side of Bonanza, opposite the mouth of Eldorado, the place being known as The Forks. The location is on bench land, with good drainage and a charming outlook. If provisions could have been obtained, there is no doubt it would have become a prosperous and growing town during the present season. The Forks must, in the nature of things, become an important point for the distribution of supplies, as it is in the heart of the gold-bearing zone of the Klondike district.

The question as to whether or not the mines of the Klondike district offer a safe and profitable field for the investment of capital is one to which many capitalists will have a satisfactory answer, through the medium of their experts on the ground, long before this report reaches the public, and therefore the facts here given will probably be of no value to them; but to men of small means seeking business opportunities, and to workingmen allured by the promise of large wages, it is hoped that the information contained in this and the succeeding section may furnish a basis for correct conclusions as to whether it is wise for them to venture into this country under present conditions.

With special reference to employment for wages in the mines, it should be stated, first of all, that the term "\$15 a day" is misleading if unaccompanied by the explanation that payment for labor in the gulches is based on the unit of \$1.50 per hour, and that at best employment is uncertain in the extreme, both on account of the climatic conditions and the difficulty of procuring supplies. During the summer months full time can generally be made, but the working season seldom exceeds

seventy days. There is then a closed season of two or three months before drifting begins, the usual time for commencing winter work being about December 1. From that date to February 1 there is an average of but six hours of daylight, while the temperature frequently drops to 60 or 70 degrees below zero, rendering it difficult, if not impossible, to get in full time, the average time made during those months not exceeding six hours a day. Diligent inquiry among scores of miners who worked for wages during the past season failed to discover one who had made full time for 150 days, the average probably falling below rather than above 100 days. The cost of a year's outfit at the prices charged in the stores would be about \$600, but if the stores are unable to supply a full outfit, as was the case last summer and has been the case nearly every year since the first settlement of the country, the miner is obliged to purchase from speculators and small traders sufficient supplies to make up the deficiency, at prices which bring the cost of his year's outfit to a figure more nearly represented by \$1,000 than the first sum named. This enormous cost of living leaves the miner with little or no means after the purchase of his outfit to devote to other purposes. To support a family under such conditions is out of the question, and the only opportunity a miner has to better his condition is to work just long enough to pay for a "grub stake" and then go into the hills and prospect. If he makes a successful strike, he is prepared to pay the exorbitant prices charged for supplies, and can work his mine; if he fails, he may again go to work for wages or go out of the country and bring in an outfit over the trail, an alternative frequently chosen.

Even under the hard conditions prevailing during the past fall concerted action was taken to reduce wages from \$1.50 to \$1 per hour. On September 23 certain mine owners met in Dawson and adopted a resolution reducing wages to \$1 per hour from October 1. The wage-workers met at The Forks on September 26 and adopted a counter resolution, declaring that wages would be kept at \$1.50 per hour. If it had not been for the food panic, which is fully described under the head of Dawson, it is probable that the question would have come to an issue October 1, and with a large number of unemployed men in the country there is no doubt as to what the result would have been; but on account of the scarcity of provisions, supplemented by the fact that the only workingmen in the country even partially supplied were those already employed, the mine owners were forced, for the time being, to recede from their position. Many of the owners claim that it is impossible to operate their mines at a profit with wages at the present figure, and they are either working them in a very small way this winter or letting them lie idle, waiting for the reduction of wages which must inevitably come with an increase in the food supply.

It has been very difficult to secure any trustworthy estimates as to the probable output of the mines during the present season (1897-98). Many enthusiastic mine owners predict that it will reach \$15,000,000,

but the more conservative place it at from \$8,000,000 to \$10,000,000. The latest information received (December 15, 1897) indicates that there are about 1,500 men engaged in mining on Bonanza and Eldorado, and as many more on other creeks in the Klondike district, a number that would probably have been doubled had it not been for the shortage of supplies. Up to December 15 no new developments had occurred in the district to change the opinion of those best informed that no creeks will be found to equal Bonanza and Eldorado in richness. In speaking of this subject an old practical miner says:

“Whatever may have been the cause that concentrated the gold in the two great creeks, it would seem that they have become rich at the expense of a vast tract of country which must, of necessity, be poor. Nor is there anything unnatural or unlikely in this. That it is so with the Klondike gold field has now become quite evident, and all the rich strikes that will ever be heard of from this part of the country have already been reported.”

DAWSON.

About the 1st of September, 1896, Joseph Ladue, of the firm of Harper & Ladue, the owners of a trading post and sawmill at Sixty Mile, came down from that place and located the town site of the present town of Dawson, selecting a level plot of ground on the east bank of the Yukon just below the mouth of the Klondike, and fifty-five miles east of the boundary line between Alaska and Northwest Territory. The sawmill was brought down from Sixty Mile and set up on the river front about a mile below the Klondike. Ladue erected the first house in Dawson, and had a small stock of goods transferred from the trading post at Sixty Mile. His supply of provisions, however, was inadequate to meet the demand, and many of the prospectors were obliged to go to Forty Mile and Circle City to procure outfits for the winter. The sawmill was put into operation at once, and has turned out about 2,000,000 feet of product, supplying the mines with sluice-box lumber and the town and vicinity with building material. But little building was done during the winter, the cold weather making such work impossible, but men were engaged in getting out logs for the construction of houses in the spring. On the 1st of January, 1897, there were only three or four houses in the town and but few men passed the winter there. As stated elsewhere, some 1,500 came into the district during the winter, but with few exceptions they passed up the Klondike and remained in the gulches till spring. By midwinter it was generally recognized that an extraordinary strike had been made, and as it was evident that Dawson would become the distributing point for the mines, there was an active demand for town lots. By the 1st of June eight or nine buildings had been erected on the river front, and there was a population of five or six hundred in the town, living principally in tents. There were three gambling houses and saloons, all

doing a big business, one taking in an average of \$1,000 a day over the bar, and many games of faro, roulette, etc., were running day and night. Numerous big clean-ups had been made in the gulches, and the town was flooded with gold dust, it being no uncommon thing to see a miner enter a saloon with a sack containing \$3,000 or \$4,000 in dust and leave it with the barkeeper, while he proceeded to "see the town," the sight usually proving so expensive that he had but a small balance to his credit at the bar when final settlement was made.

On June 2, 1897, the steamer *Bella*, belonging to the Alaska Commercial Company, reached Dawson, being the first boat to get up the river. She had wintered at Fort Yukon, and brought from that point and Circle City about 450 tons of freight, with 225 passengers from the latter place. The representatives of the Alaska Commercial Company immediately opened up for business in the small cabin formerly occupied by Ladue, taking in about \$6,000 as the result of the first day's sales, and at once made preparations to erect a store building and warehouses. Meantime the steamer *Bella* returned to Forty Mile and brought up 120 passengers from that place.

On June 8 the North American Transportation and Trading Company's steamer *Weare*, which had wintered at Circle City, reached Dawson, bringing up 300 tons of freight and twenty-five passengers. Capt. John J. Healy, the manager of the company, arrived on the *Weare* from Fort Cudahy, and at once began the construction of a store and warehouses for the accommodation of the business of his company. In the latter part of July the sawmill at Fort Cudahy was removed to Dawson, and it has since been in operation, having probably turned out 1,000,000 feet of lumber at the present writing.

Building operations were prosecuted vigorously during the summer, and by October 1, 1897, there were between four and five hundred houses in the town, many of them very large and expensive. The Alaska Commercial Company had completed their buildings, which are the largest in Dawson. Their store building is 40 by 80 feet and two stories in height, constructed entirely of logs, and they have one warehouse 30 by 190 feet, constructed of corrugated iron. Besides these large buildings they have three other warehouses, varying in length from 50 to 100 feet, all being 30 feet in width, and a fine two-story log house used by the employees of the company for living quarters. The cost of the buildings, according to a statement furnished by the company, was nearly \$250,000. At the above date the North American Transportation and Trading Company had also completed their buildings, consisting of a fine commodious store building, constructed of logs; three warehouses, constructed of corrugated iron, and a comfortable dwelling house. The cost of these buildings is stated by the company to have been about \$150,000.

The town site of Dawson extends from the Klondike along the Yukon about a mile and a half to a high bluff, which comes down to the river

and extends back about half a mile from the river to a steep range of mountains, being of nearly uniform width. The companies' stores are located on the front street, facing the river, about a mile below the Klondike. Along the river front, toward the Klondike, there is a row of buildings, thirty-five or forty in number, which are occupied by saloons and gambling houses (now numbering fifteen), restaurants, etc. Some of these buildings are quite large, the principal one, the opera house, being 40 by 80 feet and two stories in height. The lot on which it stands was purchased for \$12,000, and the building itself cost \$20,000. Many lots on the front street have sold at prices ranging from \$3,000 to \$12,500, and residence lots sell for from \$300 to \$1,000, according to location.

In the upper part of town, facing the river, are situated the barracks of the mounted police. These consist of five or six well-constructed log buildings, forming a hollow square, the principal one, the quarters of the captain in command of the force, being two stories in height.

At the lower end of town, on a bench overlooking the river and the town, is situated the Sisters' Hospital, occupying three fine buildings. This is the most eligible part of Dawson at present for residences, and quite a number of comfortable cabins have been erected there. The greater number of the private residences, however, are located on the flat between the front street and the mountains. This portion of the town is a muck bed, and during the summer months is covered with stagnant water to a depth of a foot in many places. No attempt has been made to drain it, and as a consequence there were many cases of typho-malarial fever during the past summer, there being thirteen patients in the hospital October 1, 1897, suffering from this disease. Fortunately the fever is not of a virulent type, and yields readily to treatment, but few deaths being reported. About seventy-five deaths occurred in the district during the past year, many the result of bad living. Unless some concerted action is taken looking to the improvement of the insanitary condition of the town, there must inevitably be a great deal of sickness next summer, when the situation will be aggravated by the accumulation of offal during the winter, and the overflowing cesspools.

Many newcomers during the past season suffered from a troublesome dysentery, evidently brought on by drinking water from the Yukon, which is strongly impregnated with minerals, especially below the mouth of White River, which takes its name from a white substance in its waters, supposed to be volcanic ash. The water when drunk has much the same effect as the alkali waters of the streams in the western part of the United States. There is also much complaint among the old-timers of kidney and bladder affections, which they universally attribute to the water.

Across the Klondike from Dawson, occupying a triangular tract of ground bounded by the Yukon, the Klondike, and the mountains, is a collection of twenty-five or thirty cabins locally known as "Louse Town," so named by some observant and facetious individual who was

probably cognizant of a predominant peculiarity of the Indians living there. This is the most healthy part of the town, being high and dry and having good drainage, and when relieved of the incubus of its present local appellation, which it is presumed will disappear with the passing of the red man, will be the most desirable portion of the town for residence. Just opposite Dawson, on the west bank of the Yukon, is an eligible sight for suburban residences, and already a number of comfortable cabins have been erected there.

Nearly all the houses in Dawson are built of logs. A typical cabin is 14 by 16 feet, inside measurement, requiring for its construction from twenty-eight to forty logs, the number depending on their size. The walls are carried to a height of eight feet, being surmounted by a gable roof with a three-foot pitch, supported by three logs laid parallel with one another, one forming the ridgepole. Across these supports, arranged as closely together as possible, are placed small poles or slabs, which extend a foot or so beyond the walls, forming the eaves. Over these a layer of moss is spread and the whole topped out with earth to the depth of six inches. The walls are chinked with moss and a single-sash window is placed in the south wall to admit the sunlight. The floors of the cabins built last winter generally consist of hewn logs or whip-sawed lumber, but flooring purchased from the sawmills is now commonly used. Such a cabin as that described, when heated by a Yukon stove, is quite comfortable, even in the coldest weather. The expense of constructing cabins is considerable. All the logs used in Dawson are rafted from points up the river, and as the demand for logs at the sawmills and for building purposes has exhausted the supply in the immediate vicinity of the town, the loggers are obliged to go from 25 to 150 miles up the river to find logs of sufficient size, the best logs for lumber being secured in the neighborhood of Fort Selkirk, about 150 miles above Dawson, though good house logs can be found at much nearer points. The price of logs for lumber, in the water on the river front, is \$50 a thousand feet, board measurement. Logs for building purposes cost \$5 apiece in the water, and the expense of transporting them to the residence portion of the town is as much more, a man with two horses engaged in this work receiving \$5 per log or \$50 a day for such services. The moss for a cabin costs from \$25 to \$30.

The prices of lumber at the mills are as follows: Common rough lumber, \$140 per 1,000 feet; sluice-box lumber, \$150; six-inch flooring, \$190; four-inch beaded ceiling lumber, \$200 (double-surfaced, \$240). The wages paid by the sawmills are as follows: Foreman, \$12 a day; engineer, \$12; sawyer, \$12, and a common laborer, \$10. The mills run night and day from early in May to October 1, working two shifts of ten hours each. Each of the mills employed about ten men during the past season. The price of logs in 1896 was \$25 per 1,000 feet (board measurement); but during the season of 1897 the price advanced to \$50, on account of the scarcity of logs in the immediate vicinity. A good log-

ger can make \$20 a day during the season at this price, but the season is short and the work exceedingly hard, the men being compelled to remain in the water for hours at a time while constructing the rafts.

Carpenters receive \$15 a day, and common laborers of all kinds receive \$10 a day, ten hours constituting a day's work. The wages of laborers during June and July were \$15, but they were reduced August 1, 1897, to the present figure.

These high prices of material and labor make the expense of building very great, an ordinary one-room cabin, such as that above described, costing from \$700 to \$1,000, according to finish. If a rough-board partition is desired, \$150 has to be added to these figures to secure it. The cost of a two-story business building 25 by 80 feet runs high up into the thousands, many of the buildings of this class costing from \$12,000 to \$20,000 each, according to finish. Some of the more pretentious structures are constructed of sawed logs, cut to a uniform thickness of six inches, with the edges squared, forming a weather proof six-inch wall. These buildings present a very neat appearance and possess all the advantages of the ordinary log house as regards warmth and durability.

There is one tin shop in Dawson. The force of five or six men was employed during the fall almost exclusively in the manufacture of stoves. The ordinary Klondike (or Yukon) stove costs \$40. This is made of No. 20 sheet iron, being 30 inches long, 14 inches wide, and 10 inches deep, with two holes, and having an oven 9 by 14 inches, the remainder of the space being taken up by the fire box. A larger size, containing five holes, costs \$50. These stoves are good bakers, and heat a small cabin comfortably with very little fuel. Stovepipe (5 inch) costs \$1 a joint. A copper wash boiler costs \$10; tin wash boiler, \$6; teakettle with copper bottom, \$5, and other utensils in like proportion. Tinsmiths receive \$15 per day of ten hours, the charge for work done outside the shop being \$20 a day per man.

There are two watchmakers in Dawson, whose scale of prices for repairing is as follows: Cleaning, \$5; main spring, \$4; open-face crystal, \$1.50; hunting-case crystal, \$1; balance staff, \$6 to \$8.50; roller jewel, \$3; hole and cap jewel, \$4; hands, 75 cents; lifting spring, \$5.

Two blacksmith shops, each employing from two to four men, are kept busy shoeing horses, making picks, shoeing sleds, etc. The charge for shoeing a horse all around is \$20; making pick, \$8; shoeing dog sled (seven feet long), \$10. Blacksmiths receive \$15 per day of ten hours.

One of the restaurants still open October 1, 1897, paid the following wages, board and lodging included: Two cooks, \$10 a day each; waiter, \$30 a week; dishwasher, \$25 a week; woman helper, \$25 a week.

The Opera House saloon, the principal establishment of the kind, pays weighers \$20 a day. Barkeepers receive from \$15 to \$20 a day, twelve-hour shifts, according to style and the seductiveness of their decoctions. The gambling department of the same institution pays its

dealers from \$15 to \$20 a day, twelve-hour shifts. These are the highest wages paid for this class of service. Other saloons pay from \$10 to \$15 a day, the prevailing rate being \$12.50. The following prices are charged in the saloons: Whisky, beer, seltzer, beef tea, etc., 50 cents; cigars, 50 cents; sherry and egg, \$1.50; milk (canned) punch, \$1.50; champagne, two ounces of gold (\$34) per quart bottle—three ounces (\$51) when scarce. The Opera House runs a dance hall, in which six or eight women are employed, their tour of duty extending from 6 p. m. to the close of the festivities, generally 4 or 5 o'clock in the morning. They receive a salary of \$40 a week and a commission of 25 per cent on the drinks and cigars consumed by their partners. The more attractive and industrious make as high as \$100 a week. The dance hall is nightly crowded by a motley throng, many of the leading citizens frequenting the place and leading in the dance. An habitué of the institution, in determining the length of time he will be able to participate in the revelries, bases his calculation on the number of "allemande-lefts" he has remaining in his sack.

The salaries paid by the commercial companies are as follows, including board and lodging: Bookkeepers, \$125 a month, and clerks, \$100. Laborers in the warehouses receive \$125 per month, without board.

Three or four laundries are in operation, charging from \$4 to \$6 per dozen pieces, the price depending on the amount of work on hand and the inclination of the laundress to accept more orders.

The one barber shop charges the following prices: Shaving, 50 cents; hair cutting, \$1; shampoo, \$1; bath (six gallons of lukewarm water), \$1.50. One journeyman barber was receiving \$75 a week up to October 1, 1897, tips amounting to \$25 or \$30 more; but he was forced to go down the river on account of lack of supplies. Two other barbers received 60 per cent of their receipts.

There are five or six physicians in the town, their fees being an ounce of gold (\$17) per visit. For visiting a patient in the gulches the charge is from \$100 to \$500, according to distance.

During the past year some thirty horses were engaged in packing between Dawson and the mines. One of the leading freighters furnished the following figures: Summer rate for packing, 20 to 40 cents a pound, according to distance; 30 cents to The Forks (13 miles from Dawson). The winter rate is 8 cents to The Forks. The packer receives \$100 a week and boards himself. Feed costs from \$3 to \$4 a day to the animal, hay ranging from \$250 to \$500 per ton, and a good horse packs 200 pounds, making ten round trips a month, on an average. A horse costs from \$300 to \$600.

Cordwood costs \$25 per cord laid down at the door ready to burn—\$15 in the water, \$5 for hauling to the place of consumption, and \$5 for sawing into stove lengths.

The civil government is in the hands of the Northwest mounted police. The force consists of a fine body of twenty-five or thirty men. The inspector in command has been on the Yukon for three years, having

been stationed at Forty Mile previous to the discovery of gold on the Klondike. He has full magisterial powers, and the fact that he is universally esteemed by all classes in the community indicates that he performs the difficult duties of his position with wisdom and discretion.

The business of provisioning the community is almost exclusively controlled by the two great commercial companies whose establishments have been described, as they possess the only means of bringing merchandise into the country in large quantities. During the past summer considerable quantities of goods of various kinds were brought in over the trails and down the Yukon in small boats, but these consisted principally of light articles known to be scarce here and therefore commanding abnormal prices; otherwise the small traders could not have competed with the commercial companies. It is impossible for the general public to secure the transportation of freight by way of St. Michaels, as the companies require the full tonnage of their boats for the accommodation of their own business.

It is claimed to be the custom of both companies to sell goods for a fixed price, regardless of the quantity on hand, and it must be admitted that their prices, especially for the staples—those things which are absolutely necessary for fairly comfortable subsistence—are reasonable, when the great difficulties and cost of transportation are considered. (a) Ignorance of this policy on the part of those coming in over the trails last summer was a very important factor in bringing about the present scarcity of provisions. Men with large outfits at Dyea and Skagway, on learning that flour was quoted at \$12 a hundred in Dawson, would come to the erroneous conclusion that it must be plentiful, and would refuse to pay the \$40 to \$60 a hundred which was being charged for packing on the Dyea and Skagway trails. As a consequence hundreds of men came into the country without flour and other staples who would otherwise have come in well supplied.

The companies endeavor to make an equitable distribution of their goods among their customers. Each company has an order clerk, supplied with blanks, whose business it is to take the orders of customers, who usually place their orders early in the season, a deposit of \$200 being required on a year's outfit. All orders received prior to a certain date, determinable by the stock on hand and the condition of the river, are guaranteed; but all received subsequent to that date are taken conditionally. For instance, during the past season the Alaska Commercial Company guaranteed all orders placed at their store in Dawson prior to September 1, but informed customers placing orders later than that date that it might not be possible to fill them.

a This was written about the 1st of November, 1897, being based upon the statements of both companies. 'Two months' further observation on the ground demands certain modifications, which will be found in the sections on the Business Outlook, Transportation, and Fort Yukon. The paragraph is allowed to stand as originally written, as it serves most admirably as an illustration of the elusiveness of a Yukon fact.

The following typical order for a year's outfit was furnished by the Alaska Commercial Company:

ONE YEAR'S OUTFIT FOR ONE MINER.

Articles.	Price in Dawson.	Price in Circle City.
500 pounds flour.....	\$60.00	\$50.00
80 pounds beans.....	10.00	9.60
25 pounds peas.....	6.25	6.25
25 pounds rolled oats.....	6.25	6.25
15 pounds corn meal.....	3.75	3.00
1 case condensed milk, 4 dozen 1-pound cans.....	24.00	20.00
1 case cabbage, 2 dozen 2-pound cans.....	12.00	10.00
1 case roast beef, 1 dozen 2-pound cans.....	9.00	9.00
1 case corned beef, 1 dozen 2-pound cans.....	9.00	6.00
1 case sausage meat, 2 dozen 2-pound cans.....	18.00	18.00
1 case turkey, 2 dozen 2-pound cans.....	12.00	12.00
1 case tomatoes, 2 dozen 2½-pound cans.....	10.00	10.00
1 case string beans, 2 dozen 2-pound cans.....	12.00	12.00
75 pounds bacon.....	30.00	30.00
50 pounds ham.....	22.50	20.00
25 pounds dried apples.....	6.25	6.25
25 pounds dried prunes.....	6.25	6.25
25 pounds dried peaches.....	7.50	7.50
25 pounds dried apricots.....	8.75	8.75
25 pounds raisins or grapes.....	6.25	6.25
100 pounds granulated sugar.....	30.00	25.00
1 keg pickles, 5 gallons.....	5.00	5.00
1 keg sauerkraut, 5 gallons.....	5.00	5.00
5 gallons maple sirup.....	15.00	15.00
25 pounds evaporated potatoes.....	12.50	10.00
15 pounds cheese.....	7.50	7.50
20 pounds Arbuckle's coffee.....	10.00	10.00
5 pounds black tea.....	6.25	5.00
5 pounds chocolate.....	3.75	3.75
2 bottles lime juice.....	4.00	5.00
6 bottles Worcestershire sauce.....	4.50	4.50
30 pounds lard.....	9.00	9.00
1 box macaroni, 12 pounds.....	2.00	2.00
12 pounds mince-meat.....	12.00	12.00
2 pairs rubber boots.....	18.00	24.00
1 tin assorted cakes, 36 pounds.....	10.00	15.00
4 boxes candles, 120 to the box.....	24.00	28.00
1 case baking powder, 2 dozen one-half-pound cans.....	12.00	12.00
6 bars washing soap.....	1.00	1.00
5 bars toilet soap.....	1.00	1.00
15 pounds salt.....	1.50	1.50
1 case coal oil, 10 gallons.....	12.00	12.00
2 lamp chimneys.....	.50	.50
100 feet of rope, three-fourths or seven-eighths (45 pounds).....	18.00	13.50
1 five-foot bull saw.....	6.00	6.00
2 bull-saw files.....	1.50	1.50
1 pair arctic overshoes.....	4.50	4.50
2 pairs felt boots.....	5.00	5.00
4 pairs woolen socks.....	4.00	4.00
2 pairs moccasins.....	5.00	5.00
2 pairs water boots.....	5.00	6.00
6 pairs skin mittens.....	15.00	15.00
Total.....	550.25	531.35

This order was placed June 26, 1897, and was accompanied by a deposit of \$300. For two or three items the quantities are somewhat large, the order calling for 100 pounds of flour in excess of the usual allowance; but as some luxuries have been omitted, it constitutes an average outfit so far as cost is concerned. When an order is guaranteed, the goods are assembled in one pile, marked "sold," and held in the warehouse subject to the order of the purchaser. If he is a miner, he usually prefers to let his outfit remain in the warehouse until cold weather, in order to take advantage of the lower rates for freighting to the gulches prevailing after the snow falls. On account of the wholesale robbery

of caches (*a*) during the past summer and fall, even those customers residing in town allowed their supplies to remain in the custody of the companies as long as possible.

The prices quoted above will not seem exorbitant to old miners, who recall that in Tucson and Tombstone in 1877 they paid \$25 a hundred for flour at the stores, 50 cents a pound for bacon, 40 cents a pound for sugar, and proportionate prices for other commodities; nor to the old-timer who paid \$1 a pound for flour, bacon, etc., at the stores in Helena during the flush days of Last Chance. It is no doubt true that many articles command higher prices here than have ever been paid anywhere else on the continent; but it should be borne in mind that this condition has been brought about through the "cornering" of those articles by unscrupulous speculators, and that both companies have made every effort to prevent the present state of affairs, recognizing that it would injure the country and retard its development.

While the companies' prices for staples are comparatively reasonable, as stated, the same can not be said in regard to the prices charged for many other articles. As a general rule, clothing of all kinds sells for prices 200 per cent in advance of the prices charged for the same grade of goods in the States of the country; shoes and all kinds of footwear, 100 to 150 per cent advance; dry goods, 200 to 500 per cent, calico selling for 25 cents per yard, or 5 yards for \$1; patent medicines and drugs, 300 to 1,000 per cent—a popular blood purifier, which usually sells for 75 cents a bottle at retail, costing \$3 here, and drugs generally selling for \$1 per ounce, without regard to original cost. A 12-pound Mackinaw blanket sells for \$25, the prices of all grades of blankets being from 100 to 150 per cent higher than in the United States. A wolf robe, retailing for \$40 in Seattle, costs from \$150 to \$250 here, according to the financial condition of the purchaser. A repeating rifle, which retails for \$20 outside, sells here for \$50. A set of ordinary ironstone china dinner plates, costing 75 cents at retail in the United States, brings \$6 here. As 25 cents is the smallest change made, there is an immense profit in small articles, such as lead pencils, needles, thread, etc.

Refined alcohol of a grade that sells at retail in the East for \$3.75 per gallon is sold by the companies for \$40 per gallon. They charge \$17 per gallon for a brand of blended whisky that can be bought at retail outside for \$2.50, and \$120 a case (12 quarts) for champagne. Cigars of a quality usually sold for \$5 per hundred are sold here for \$14, and retail over the bars at 50 cents apiece. In the matter of smoking and chewing tobaccos the charges are more reasonable, the dealers being satisfied with an advance over outside prices of from 50 to 100 per cent.

There is an enormous profit in cheap jewelry. An imitation gold

a Household provisions are generally stored in an outhouse, called a "cache," usually constructed of a boat placed on posts six or eight feet high, beyond the reach of dogs.

watch retailing for \$5 in the United States sells here for \$10, and a gold-washed watch chain which could be duplicated outside for \$1.50 meets with an occasional sale for \$8. There is less demand for this class of jewelry, however, than formerly, the people generally demanding the best grades.

There is a fair demand among the miners for a good grade of watches and chains, the prevailing prices being from 100 to 150 per cent higher than in the United States.

There is an active sale for diamonds of from 1 to 4 carats. In October, 1897, a small diamond which cost \$35 at retail in San Francisco sold for \$150 in Dawson; but this price was exceptional.

In the spring of 1897, before the boats got up, there was a great scarcity of many kinds of provisions, and abnormal prices prevailed. Flour sold for \$125 a hundred; bacon from \$1.50 to \$2 a pound; moose meat, 75 cents a pound, and many other articles in like proportion.

One restaurant was running June 1. After the boats got up and provisions could be obtained other restaurants were started, there being four by June 15, and eight by July 10. The price of a meal was \$1.50, the regulation meal consisting of bread, butter, and coffee, bacon and beans, and canned corn. Later, when beef cattle got in, a small steak was added to the menu. A tenderloin beefsteak, ordered by the card, cost \$2.50, the charge for two eggs on the side being \$1.50. During the last week in September only two restaurants were running (all the others having been forced to close through lack of supplies), the bill of fare being as follows: Breakfast, bread, butter, and coffee, beefsteak, canned corn, and hot cakes; dinner, the same, with rice pudding substituted for hot cakes; supper, the same, minus hot cakes and pudding. Price, \$1.50 per meal. By October 1 one of these restaurants closed on account of lack of provisions, the other continuing to do business in a precarious way for a few days, and charging from \$2 to \$3.50 per meal, the character of the service deteriorating in about the same ratio as the price increased, until at the final collapse \$3.50 was being charged for bread, butter, and coffee, and a very small and exceedingly tough steak. After the close of the last restaurant, about October 10, an enterprising individual opened up a soup house, displaying the following sign: "Bean soup from 10 a. m. to 3 p. m., \$2.50." He served a fair article of soup, with a cup of tea and a slice of bread, doing a rushing business for a few days, when he was forced to close on account of the scarcity of beans.

The only medium of exchange in general circulation is gold dust, which passes current at a valuation of \$17 per ounce. Considerable coin and paper money have been brought into the country, but when any of it is paid to a business man it immediately disappears from circulation, presumably being used for the purpose of making remittances to the outside world instead of the more bulky and less convenient gold dust. Every place of business has a pair of gold scales, pre-

sided over by a weigher whose duty it is to weigh the gold dust received in the course of business. The customer pours into a little scoop enough dust to cover the amount of his purchase, and from this the weigher weighs out the exact amount, returning the balance to the customer's sack. This method of exchange has many disadvantages, the principal objection in ordinary business transactions being the loss of time in weighing, etc. Those who patronize saloons and gambling houses complain of unfair weighing by some of the less scrupulous proprietors. A weigher in a saloon who can not extract a 20 per cent advantage from the opportunities offered is not considered an adept in his line. Aside from these objections there is some loss from the careless handling of gold sacks, especially when men are under the influence of liquor, a not infrequent spectacle here. After a man has taken two or three drinks of Dawson whisky he is apt to forget to tie his gold sack, and in taking it out of his pocket to pay for the next drink is liable to sow some of his dust on the floor, where a small portion of it is naturally lost to him, but not to the janitor, who pans out the floor sweepings in the morning, often cleaning up from one to two ounces. This unsatisfactory condition in regard to the circulating medium, which exists throughout the Yukon basin, must continue until the two governments make some provision for a currency, through the establishment of assay offices or otherwise.

During August, 1897, there were about 3,000 people in the town, a large proportion of whom had come over the trails and down the Yukon, for, although the news of the great strike did not reach the outside world until the middle of July, it was known in Juneau and at other points in southeastern Alaska in February, and in April and May the Dyea trail was swarming with men from Juneau and vicinity on their way to the Klondike. A register is kept at Fort Selkirk of those passing down the river, and on October 3 this register and the count kept there showed that 3,500 men had passed that point during the season, bound for the new diggings. This number, added to those already in the country and the two or three hundred who had reached Dawson from St. Michaels, brought the population of the Klondike district up to fully 5,000, as very few people had left the country during the summer. Most of those who came down the river during the early part of the season were miners or others accustomed to the hardships of frontier life, but those arriving later were largely professional men, clerks, etc., who had never had any experience outside of the cities where they had followed their vocations and who were poorly equipped by nature and training for the struggle which confronted them under the hard conditions prevailing here. Among the number that came in during August, September, and October were many women and children, and these found their surroundings peculiarly trying, as it was impossible to secure proper shelter before the setting in of cold weather. On October 1 there were about 2,000 people in Dawson, probably 1,000 of whom were

living in tents, and in the nature of things many of them will be obliged to so live during the winter, as logs for cabins can not be secured after the river closes.

By the middle of September it became apparent that a serious scarcity of provisions for the winter was inevitable, on account of the ill success of the commercial companies in getting their boats up the river. This condition was daily becoming worse, owing to the fact that most of the people coming down the river were poorly supplied with food, while a great many were landing in Dawson with barely enough to get them there. The steamers *Healy* and *Weare*, belonging to the North American Transportation and Trading Company, on account of the low water had made but two trips each to Dawson, while the *Hamilton*, the new boat upon which the company had principally depended, had not got above Fort Yukon. The *Healy* had landed in Dawson about 305 tons of freight, while the *Weare* had brought up about 500 tons. The boats of the Alaska Commercial Company had done somewhat better, the *Bella* having made one trip from Fort Yukon and three from St. Michaels, bringing up about 1,275 tons of freight; the *Alice* had made three trips, landing 450 tons, and the *Margaret* one trip, with 200 tons. In all only about 2,730 tons of freight had been laid down in Dawson as the result of the season's navigation, and as probably one-half of this consisted of furniture, clothing, hardware, liquors, etc., the outlook for the winter was gloomy indeed. Many clung to the hope that more boats would get up, but on September 26 this hope was blasted by the arrival from Fort Yukon, in a poling boat, of Capt. J. E. Hansen, the assistant superintendent of the Alaska Commercial Company, with the announcement that no more boats could get up with cargoes on account of the low water on the Yukon Flats. This announcement produced a panic, as it was realized that the supply of food was not sufficient to carry those already in the district through till next June, while people without supplies were pouring into town from the upper river by hundreds. The news reached the gulches the next day, and within twenty-four hours most of the claim owners and miners came in to ascertain the truth and learn whether their orders at the stores could be filled. The Alaska Commercial Company announced to the public that they could fill all orders which had been placed before September 1, with a slight curtailment in flour and two or three other items, but that it would be impossible to fill orders placed after that date, and advised all persons without supplies for the winter to go down the river to Fort Yukon, where they had six or seven hundred tons of provisions cached. The North American Transportation and Trading Company assured their customers that they could fill their orders, and advised the people without supplies to remain in Dawson, predicating the advice on the assumption that all of their boats would get up. Subsequent events proved that the representatives of both companies were partially mistaken, Captain Hansen in his announcement that more boats would not arrive and Captain Healy in

his assumption that all of his boats would, for during the evening of the 28th the *Weare*, of the North American Transportation and Trading Company's fleet, reached Dawson, and in the afternoon of the 30th the *Bella*, belonging to the Alaska Commercial Company, arrived, the former with 125 tons of freight and the latter with 75 tons, both having lightened cargo sufficiently to get over the bars on the Yukon Flats, while no other boat of either company had got above Fort Yukon when the river closed, October 22.

The arrival of the *Weare* was hailed with the greatest manifestations of joy on the part of the people, who congregated on the river front to watch her progress as she fought her way up against the swift current to the landing; but when it was learned that she had only about 125 tons of freight aboard it was realized that the situation had not been relieved to a sufficient extent to render an exodus from Dawson unnecessary, and as many as could be accommodated, about 150 in all, took passage on the *Weare*, which returned down the river the next day. On the morning of the 29th the ice began to run in the Yukon, and it was evident that those who proposed to act on the suggestion of Captain Hansen, to go to Fort Yukon, would have to leave at once, as the river was likely to close within a week, and a delay of even two or three days might render the passage down in small boats extremely hazardous. The Canadian authorities fully agreed with Captain Hansen as to the gravity of the situation, and early in the forenoon of the 30th issued the following notice:

The undersigned, officials of the Canadian Government, having carefully looked over the present distressing situation in regard to the supply of food for the winter, find that the stock on hand is not sufficient to meet the wants of the people now in the district, and can see only one way out of the difficulty, and that is an immediate move down the river of all those who are now unsupplied to Fort Yukon, where there is a large stock of provisions. Within a few days the river will be closed, and the move must be made now, if at all. It is absolutely hazardous to build hopes upon the arrival of other boats. It is almost beyond a possibility that any more food will come into this district. For those who have not laid in a winter's supply to remain here any longer is to court death from starvation, or at least a certainty of sickness from scurvy and other troubles. Starvation now stares every man in the face who is hoping and waiting for outside relief. Little effort and trivial cost will place them all in comfort and safety within a few days at Fort Yukon or at other points below, where there are now large stocks of food.

C. CONSTANTINE,
Inspector Northwestern Mounted Police.

D. W. DAVIS,
Collector of Customs.

FRED. FAWCETT,
Gold Commissioner.

SEPTEMBER 30, 1897.

This notice caused many to begin preparations for the journey to Fort Yukon, and fifty or seventy-five men had embarked in small boats

for that point by 3 o'clock in the afternoon, at which hour the *Bella* made her appearance around the bend below town and slowly cut her way through the floating ice to the landing. Although the *Bella* brought up but seventy-five tons of freight, the arrival of two boats within forty-eight hours revived the hopes of many that other steamers might reach Dawson, and had the effect of temporarily checking the movement down the river.

In the afternoon of the 30th the following notice was posted throughout the town:

Notice is hereby given that all persons who are not sufficiently provided with food for the coming winter will be taken out free of charge on the steamer *Bella*, which will leave to-morrow at noon. They should report at the Alaska Commercial Company's store to-morrow morning at 8 o'clock and sign an agreement as to their transportation. They are advised to take sufficient food with them to last them to Circle City, as no meals can be served on the steamer. Sufficient supplies can be obtained at Circle City to last to Fort Yukon.

The Canadian authorities have arranged with the Alaska Commercial Company to furnish free transportation.

C. CONSTANTINE,
Inspector Northwestern Mounted Police.

DAWSON, *September 30, 1897.*

Several meetings were held during the afternoon and evening to discuss the situation, at which the authorities, Captain Hansen, and others urged the necessity of as many as could be accommodated on the *Bella* taking advantage of the opportunity offered of free transportation down the river.

The next morning the following notices were posted on the doors of the Alaska Commercial Company's store:

This store has been appropriated by the Government for the purpose of regulating the transportation of unprovided people, and is declared closed for commercial purposes for the day.

C. CONSTANTINE.

Mass meeting will be held at 10 a. m., in front of the Alaska Commercial Company's store, to discuss the food situation at Dawson and the departure of unprovided people on the *Bella*.

In pursuance of these notices the Canadian authorities took charge of the store, and a meeting was held, at which Captain Hansen again urged the people to take advantage of the opportunity offered. After the meeting a large number of men presented themselves at the store and announced their intention of taking passage on the steamer, and they were required to sign the following special agreement:

DAWSON, NORTHWEST TERRITORY, *October 1, 1897.*

The officials of the Government of the Dominion of Canada, recognizing the gravity of the situation, have arranged to have all persons not provided with food for the winter carried free of charge to Fort Yukon on the steamer *Bella*, on the following conditions: That the steamer *Bella's* officers or owners are not to be held responsible for any delays or possible nonarrival at destination of any passengers or property carried; that all persons accepting passage agree to cut wood, or

in any other manner aid in furthering said steamer's voyage, as they may be called upon to do by the captain; that they are to provide themselves with food sufficient for the trip; that the undersigned specially agree that if the ice runs so thick as to endanger the steamer and she goes into harbor between Dawson, Northwest Territory, and Fort Yukon, Alaska, they will leave the steamer at the request of the master, E. D. Dixon.

This agreement was signed by 160 persons, to most of whom five days' rations were sold, a few without funds being furnished rations free of cost. The *Bella* left Dawson at 4 o'clock in the afternoon, October 1, 1897, and the writer took passage on her for Circle City. An account of the trip will be found elsewhere. It was subsequently ascertained by actual count that only 120 of the 160 who signed the agreement boarded the steamer, and it is a reasonable presumption that the forty who remained in Dawson attached their signatures simply for the purpose of securing five days' rations.

This section was prepared from data secured in Dawson previous to October 1, 1897. From the diary of a thoroughly reliable man who arrived in Circle City January 8, 1898, the following extracts are taken:

On October 4, 1897, a boat containing six men was caught in the shore ice right above town, and all on board were drowned.

Captain Hansen estimates that about 500 people have gone down to Fort Yukon and other points.

A meeting was held at the Opera House on October 9, at which speeches were made urging men to go down the river. Another meeting was held the next day in front of the Alaska Commercial Company's store at which speeches were made on the same lines, and as a result of this meeting a scow was furnished and provisioned by the authorities, and with 20 men aboard started down the river in charge of an Indian pilot. Captain Healey announced that his company could feed everybody, but that he had been imposed upon by large operators of mines who had secured double outfits through third parties.

During the first half of October several meetings were held by the miners at The Forks and a committee appointed to ascertain how many men were working in the gulches at \$1 per hour. The committee visited every claim and cabin on the main creeks, but failed to find anybody who admitted that he was working for \$1. They secured information in regard to one or two who were working for \$1 per hour, and they dragged one such man out of the hole with a rope and told him not to work any more for \$1.

On November 8 a meeting was held in Dawson to protest against the new mining regulations, at which a memorial to the Dominion Government was prepared. A committee of ten was appointed, which subsequently selected a subcommittee of three, to carry the memorial to Ottawa. The committee of three was provided with a fund of \$18,000 and left within a few days for the outside.

Under the operation of the new regulations a prospector is allowed to locate 200 feet, 100 belonging to him and 100 feet being reserved by the Government. The uncertainty as to the enforcement of the royalty clause makes it impossible to secure any information as to the output of the mines, as the owners refuse to tell how much they are producing. We have heard the last of big pans in the Klondike district.

Captain Healey has paid \$325,000 for 27, 28, and 29 above Discovery on Bonanza—the largest sale so far reported.

Outfits are being sold as a whole for \$1 and \$1.25 per pound and many men are going out of the country. Candles sell at from \$40 to \$75 per box; flour, \$80 to \$150 per 100 pounds; whisky, \$30 to \$35 per gallon; champagne, \$500 a case. One restaurant started November 1, charging \$3.50 per meal; porterhouse steak, \$5. There is plenty of meat. The meals consist of bacon and beans, corn, tomatoes, and steak, with bread, butter, and coffee. December 15 three restaurants were running, with prices as above. Dogs sell as high as \$350 apiece, and \$1,700 has been paid for a team of five dogs. Fare to Dyea by dog team, from \$500 to \$1,000, passenger being allowed to walk, simply having his outfit carried. Coal oil is quoted at \$20 per gallon, but can not be obtained.

The large number going out over the trail, estimated at from 300 to 500, has greatly relieved the food situation. Supplies make their appearance whenever prices sufficiently attractive are offered for them, say \$2 per pound, and the speculators are reaping a rich harvest. There will probably be no actual starvation in the district, but a very large proportion of the gold dust that was in general circulation at the beginning of the winter will by spring be concentrated in the hands of the few who hold the keys to the grub boxes.

THE TRIP OF THE BELLA.

When the *Bella* swung into the stream at 4 o'clock in the afternoon of October 1, 1897, to attempt the perilous passage to Fort Yukon, almost the entire remaining population of Dawson was congregated on the river front to watch her departure. Eldorado and Bonanza "kings" touched shoulders with prominent business men; prosperous gamblers and saloon keepers, passive spectators of the scene, smiled complacently as they congratulated themselves on being able to remain with their "mints" during the winter, while here and there in the throng could be seen a representative of that unfortunate class of women which our more highly civilized and enlightened communities can always produce in ample numbers to supply the demands of every mining camp. Gazing on the receding sea of faces it did not require great skill in physiognomy to reach the conclusion that if the object of the promoters of this movement was to rid the town of its tin-horn gamblers, low-grade harlots, and cache robbers, they had so far signally failed, for these, some three or four hundred strong, were still in Dawson, where they will remain, it is presumed, to pursue their devious ways and fatten on the spoils of a lax morality.

The weather was raw and cold, with a piercing north wind blowing, and a leaden wintry sky hung like a pall over the landscape and emphasized the crudeness of the town.

During the day the bow of the steamer had been encased at the water line with an eighteen-inch strip of sheet steel, to protect the hull against the action of the ice, which was running in the river so thick and heavy that when the larger cakes struck the boat the grinding crash could be heard above the noise of the machinery, and the force of the impact jarred her from stem to stern. As the *Bella* entered the current, and the attempt was made to head her downstream, it was

found that she would not answer the helm, and she was carried helplessly down the river, stern first, by the five-mile current. An examination of the rudder disclosed that the stretcher had been bent by the ice, and steps were at once taken to repair it. The boat drifted a mile or two, turning completely around once or twice in that distance, when the damaged rudder was repaired and the boat gotten under control. She proceeded without further trouble to a point about forty-five miles below Dawson and eight miles above Forty Mile, when it was discovered that the suction pipe of the well which feeds the boiler was clogged with anchor ice, making it impossible to supply the boiler with water, and the boat was run ashore at 7 o'clock and tied up for the night.

The *Bella* is a boat of 150 tons, built for towing barges, and has no accommodation for passengers. There were 130 people aboard, including the crew, so the problem of finding a place to spread one's blankets for the night was a difficult one for the more diffident to solve. Many secured fairly comfortable quarters, so far as warmth was concerned, in the boiler and engine rooms, on the cordwood, and elsewhere; others spread their blankets on the tables in the mess room and on the floor of the cabin, while a few were forced to sleep on the open deck. Most of the passengers were well supplied with blankets and clothing suitable for the climate, but quite a number were insufficiently clad, especially as regards footwear, and poorly provided with blankets. For supper every man shifted for himself, drawing on his rations of hard-tack and bacon, which had been secured at Dawson.

During the three-hour run from Dawson an occasional glance from the deck revealed the fact that the boat was passing some of the most picturesque scenery on the continent, but as it would require a stoic and a poet combined to appreciate scenery, not to speak of describing it, under such dismal circumstances, this subject must be left to abler pens and to the camera. A more profitable and absorbing subject presented itself in the cargo of living freight aboard the *Bella*, and the long and dreary evening was spent in studying human faces and in listening to the stories of many of the passengers and learning the details of their rough experiences. By actual count there were 120 persons aboard who had signed the transportation agreement at Dawson. A few were of the class of unfortunates who are constantly "moved on," and to them their present surroundings were worse only in degree than those to which they had been accustomed; but it was apparent that to the great majority it was a hard and bitter trial—a humiliating denouement to what they had fondly dreamed would be a most successful venture. At best, they faced eight months of enforced idleness in an inhospitable climate, with perhaps no habitation better than a tent or a mere shack, and an almost absolute certainty of short rations. The passage down the river was considered, even by the captain and the crew, as extremely dangerous, for if the boat should be caught in an ice jam in midstream, an event imminent at every bend, she would be cut to pieces in a few hours, with the probability that but few

of the passengers would get ashore alive. Even if she should escape this great danger and be forced to go into winter quarters at Forty Mile there would be the long wait of six weeks for the ice to form, and then the long journey afoot to Circle City, a distance of 240 miles—an undertaking which but few men are equipped by nature to endure under the most favorable conditions, and which to many of the passengers, unaccustomed as they were to hardship and unprovided with suitable clothing and robes, would mean starvation or death from exhaustion and freezing. That the passengers on the *Bella* showed such fortitude, forbearance, and equanimity under the trying ordeal is remarkable. The superb discipline which by common consent was maintained throughout the journey may be accounted for by a fact which was elicited the next morning at Forty Mile. In taking a poll of those who had signed the transportation agreement, it was learned that 112 were citizens of the United States, while but eight were of other nationalities—six Canadians and two Russians. The result of this poll gave emphasis to another fact, which is apparent to the intelligent observer on the ground, and that is that fully 75 per cent of the people in the Klondike district are American citizens; in fact, it is evident to all who have studied the movement of events in the Yukon Valley during the past five years that if it had not been for American enterprise the Klondike and its tributaries, instead of attracting as they do the attention of the world, would be now, as in the past, chiefly noted as the spawning ground of the salmon and the haunt of a particularly ferocious species of bear.

Another significant fact elicited by careful inquiry was that many had signed fictitious names to the transportation agreement, fearing that a possible publication of the names might reveal to their loved ones at home their unhappy predicament and perhaps, through exaggeration of the situation, cause needless anxiety as to their condition. Among those conversed with were three physicians, who by their conversation and their diplomas showed that they were skilled in their profession, one having given up a growing practice in Chicago to seek a wider and more profitable field on the Klondike; a watchmaker, with three thousand dollars' worth of fine watches, etc., which the lack of supplies had prevented him from disposing of to advantage in Dawson; a half dozen farmers from Iowa, Nebraska, and other States, who had hoped to obtain here enough gold to enable them to pay at least the interest on their mortgages, which had been increased to secure the means for this venture; a bank clerk from Boston, who had left a \$2,000 position with the intention of going into business for himself in the new gold fields; three or four lawyers, from as many different cities, who had come here with the view of building up a lucrative practice in mining litigation, but whose only practice up to the present time had been an occasional exhibition of their knowledge of the rules of order and parliamentary procedure at miners' meetings; a feeble old man of 70, who by appealing to numerous friends and relatives had managed

to scrape together \$500 to invest in this last chance, and who epitomized his grievous condition by saying, "I would rather starve or freeze to death here among strangers than to die of humiliation and a broken heart at home." These and many others told their tales of struggle and hardship and shattered hopes—all pervaded by a pathos that brought the heart to the throat and was far too intense for tears—and would not be comforted.

At 6 o'clock the next morning the boat got under way, and about two miles above Forty Mile began to "drift" again, her rudder having been badly injured by the ice. By this time the volume of ice had increased to such a degree that it was absolutely necessary, in order to escape destruction, to make a landing, preferably in the mouth of Forty Mile Creek, which it was exceedingly difficult to do without a rudder. Fortunately, as the steamer approached the mouth of the creek her bow swung round, quartering upstream, and as she came opposite the mouth the engines were started, and a landing made on the lower side of the point formed by the south bank of Forty Mile Creek and the Yukon, where the boat was protected from the running ice in the river and for the time being safe. The captain announced to the passengers that as long as the ice ran so heavily it would be impossible to proceed, and that it would probably be two or three days before it would be safe to continue the journey. As there were only four days' rations aboard, a meeting was held to devise means of securing more provisions. This meeting was conducted in an orderly manner. The agent of the Alaska Commercial Company at Forty Mile, who had been a passenger on the *Bella* from Dawson, stated that he could furnish some flour, but that it would be impossible for him to supply anything else. As the result of the meeting a committee of three was appointed to visit the store of the North American Transportation and Trading Company, at Fort Cudahy, just across the creek from Forty Mile, and ascertain whether any provisions could be obtained there. The agent of the company informed the committee that he could supply enough provisions, with the exception of flour, to last the passengers ten days, the agent of the Alaska Commercial Company agreeing to furnish twenty sacks of flour. As a result of this conference the following bill of goods was purchased and taken aboard the steamer:

360 pounds of beans.....	\$43. 20
100 pounds of rice	25. 00
200 pounds of dried fruit (apples, peaches, and prunes).....	60. 00
200 pounds of granulated sugar	75. 00
50 pounds of coffee.....	37. 50
20 pounds of tea	25. 00
18 cans of baking powder	18. 00
20 pounds of salt	3. 00
100 pounds of bacon	40. 00
1 case of lard	18. 00
20 sacks of flour	120. 00
Total	464. 70

These goods were paid for by the passengers, the amount being apportioned pro rata. For the purpose of ascertaining the number of people aboard and their financial ability to stand an assessment, the poll above referred to was taken, and it was learned that nine were without means, while the others, as determined by a casual observation of their sacks as they made payment, had from \$20 to \$1,000 apiece, there being probably \$35,000 or \$40,000 in gold dust among the passengers. There were quite a number of old-timers aboard, nearly all of whom were well supplied with dust, there being one man aboard who had sold his mine on Bonanza for \$30,000 and had with him \$10,000 in gold dust. The charge had been freely made in Dawson and on board the steamer that there was an "invisible" supply of provisions in the Klondike district, and that the movement to send people to Fort Yukon was a ruse to get them away from Dawson so that the mine workers would have sufficient supplies to run the mines until freezing-up time next year, thus avoiding the great expense of summer packing. The fact that so many old residents, thoroughly familiar with the situation and amply able to purchase supplies, even at speculative prices, were forced to leave Dawson to secure provisions for the winter, would seem effectually to dispose of this charge.

A steward was selected by the passengers, with a volunteer corps of cooks and waiters, and messes of thirty formed. The cooking was done in the galley, and two meals a day were served—breakfast at 8 and dinner at 5. As the items in the bill will indicate, the menu was not exhaustive, but there was plenty for all, and everybody accepted the situation with the best possible good nature.

The agent of the Alaska Commercial Company had brought down on the steamer from Dawson a ton or so of provisions for the subsistence of the company's mess at Forty Mile, and some of the passengers conceived the idea of confiscating these goods for use, in case the boat was unable to proceed, during the long journey on the ice to Circle City. A meeting was held on October 3 to consider the matter, and after some discussion a vote was taken on the question, with the result that the agent was allowed to remove his goods.

On the same day there was a movement on the part of a few dissatisfied passengers to force the captain to proceed down the river. The captain explained the difficulties of running the boat in the ice, stating that the rudder and the wheel would inevitably be cut to pieces and the boat rendered helpless in midstream. This explanation was accepted as final, and no further action was taken in the matter.

From October 4 to 7 the temperature ranged from 6 degrees below to 22 degrees above zero in the morning, rising to from 12 degrees to 27 degrees above during the day, and the ice continued to run, getting thicker and harder from day to day until the 8th, when the weather became warmer and the ice thinned out considerably. The captain announced to the passengers that evening that if the condition of the

ice continued to improve he would make an attempt to start for Circle City the next day.

At 8 o'clock in the morning of the 9th the temperature was 25 degrees above zero, and the river had become so nearly clear of ice that the captain decided to proceed on the journey. While the *Bella* lay in the mouth of Forty Mile Creek the ice had formed around her to a thickness of six inches, and extended to the running water in the Yukon, a distance of about 100 feet from the stern of the boat. Several hours were spent in cutting a channel about forty feet wide through this ice to the running water, the released ice floating into the river in immense cakes, one of which was perhaps thirty feet square. In the meantime another small supply of provisions had been secured from the companies, consisting of five sacks of flour, 100 pounds of dried fruit, and 200 pounds of beans. It was calculated that this addition to the commissary would enable the passengers to stand a siege of five or six days' duration. At 1 o'clock p. m. the line was cast off, and the *Bella* was soon in midstream, again battling with the ice. Her bow had scarcely swung downstream when her rudder for the third time became useless, and the same old performance of drifting at the mercy of the current was repeated. After floating thus for a mile the rudder was repaired, and the boat proceeded for an hour or so without further trouble.

At 2.10 p. m., as the boat approached a bend in the river, an immense ice jam was encountered, the ice in many places being piled to a height of ten or fifteen feet and apparently extending clear across the river. It seemed impossible for the boat to get through, and she was tied up to the bank and the Indian pilots sent ahead to inspect the jam. After a walk of a mile down the bank they returned and reported that the channel was open. Advantage was taken of the stop to put the rudder in good condition, and at 3.10 the boat renewed her journey, reaching the wood yard, twenty-three miles below Forty Mile, at 5 o'clock, where a supply of wood was taken on and the boat remained for the night.

The next morning (Sunday) at 6 o'clock the steamer proceeded on her way. The mouth of Boundary Creek, thirty-five miles below Forty Mile, was passed at 8 o'clock. At this point the boundary line between American and British territory crosses the Yukon, intersecting the river at nearly a right angle. The line is distinctly marked by a strip cut through the timber from the river bank to the summit of the mountain on either side. At 10.30 the rudder again became unmanageable, and in spite of all the pilots could do the boat ran her nose into the bank; but no damage was done, and she got off into deep water almost immediately. At 1.40 we passed two men in a small boat, fighting their way through the ice, on the way to Fort Yukon, and at 2 we passed two more men who had adopted the same means of getting to the food supply.

At 3.25 p. m., at a point about sixty-five miles above Circle City, the boat ran on a sandbar in the middle of the river, with 200 yards of

swift water full of running ice on either hand. She swung around broadside to the bar and stuck there for forty-nine hours, during all of which time the ice was coming downstream at a speed of five miles an hour and pounding with terrific force against the upper side of the hull. The pressure of the current against the boat pushed her high up on the bar, forming a ridge of gravel at the lower side that was visible above the surface of the water amidships for a distance of twenty feet.

This accident furnished a striking example of the stupidity and unreliability of Indian pilots, and proved conclusively that they are not good readers of water. The captain, who had been in the pilot house all day anxiously watching the course of the boat and assisting the pilots over the bad bars, was forced to leave his station for a few minutes, and had hardly turned his back on the pilot house when the accident occurred. At this point the river is about 500 yards wide, having a channel on either shore, with an expanse of comparatively slack water in the center, which would indicate to anyone at all familiar with the river the existence of a bar. The boat had been following the left-hand channel, which was broad and deep; but the pilot attempted to run the boat across the head of the bar into the right-hand channel, the natural consequence being that she struck the bar, broadside on.

The crew were immediately set to work to spar the vessel off the bar. This operation consists in planting a spar (a twenty-five-foot spruce log, twelve inches in diameter) on the bed of the river, at the lower side of the bow, and rigging a block and tackle on the upper end, attaching the rope to the capstan, and then by the application of steam power swinging the boat gradually upstream. When she has been worked up as far as the first spar will carry her, the other spar is used in like manner, and the operation repeated until the bow is straight upstream, when the engines are started forward and a slight application of power by the capstan swings the boat around so that the current catches the bow and throws her off into deep water. This is an exceedingly tedious process, even under the most favorable circumstances, but owing to the great pressure exerted by the swift current against the upper side of the boat it was exceptionally so in this case. The bow would no sooner be swung upstream twenty or thirty feet than a pulley hook would break or straighten out, and the boat would be thrown by the current back to her original position. During Monday several pulley hooks were thus straightened, and at 11 o'clock in the forenoon one of the spars was broken, and as it was impossible to work with one spar it was necessary to send men ashore in a small boat to secure a new one, a very dangerous undertaking on account of the condition of the river. A half day was lost in this work, and the new spar had hardly been set when the second old one broke, and still another new one had to be brought from shore. At this stage night set in, but little progress having been made, and the outlook was very disheartening. It was thought by many, even the captain sharing in the opinion, that it would

be necessary to abandon the steamer and go down the river on rafts, there being but two or three small boats available. Fortunately the ice was decreasing rapidly, both in volume and hardness; if it had increased to the quantity which was passing down the river during the tie up at Forty Mile, the boat would undoubtedly have been cut to pieces. During the afternoon an immense cake of ice, which was recognized by all as that which had been cut from the channel at Forty Mile, was discovered approaching the boat. It just cleared the hull, but struck the wheel, giving the boat a terrific jar and carrying away one of the blades of the wheel, and then passed on without doing further damage.

During Tuesday forenoon considerable progress was made, the bow having been swung upstream about 45 degrees at 12 o'clock. At 4.30 in the afternoon the boat pointed straight upstream, the engines were started and one more pull on the capstan sent her off into deep water, where the swift current caught her and sent her on the way to Circle City, with a very happy crowd aboard. But the troubles were not yet over, for the steamer had gone only a mile or two when the suction pipe of the well again froze up and a landing was made for the night. At 10 o'clock that night a scow from Dawson, in charge of an Indian pilot and containing twenty-one men, hove in sight and tied up just below the steamer. This scow had left Dawson fifty-two hours before, and by traveling day and night had made a distance of 240 miles. The captain offered to take the passengers from the scow aboard, but after hearing the story of the *Bella's* troubles they decided to stick to the scow, and proceeded down the river at once. As afterwards learned, they traveled all night and reached Circle City at 10 o'clock the next morning, and thence passed on to Fort Yukon.

The next morning the steamer got under way at 6 o'clock, and at 1 p. m. she reached Circle City, having been thirteen days in making 300 miles, and having furnished to all her passengers enough experience in navigation of the Yukon to thoroughly satisfy the most adventurous. Here it was ascertained that the river had closed this side of Fort Yukon, and the *Bella* went into winter quarters in a slough just off the upper end of town, while most of her passengers passed on to Fort Yukon in small boats, a few remaining in Circle City for the ice to form before proceeding to that point.

FORTY MILE.

The first discovery of gold in American territory in the Yukon Valley was made in 1886 at Franklin Bar, on Forty Mile Creek, thirty-five miles above its mouth. This creek, which is about 250 miles long, received its name from the fact that it enters the Yukon forty miles below old Fort Reliance. The first steamboat that came up to Forty Mile post arrived there July 27, 1887, at which time eighty-five men were at the mouth of Forty Mile Creek, subsisting almost entirely on

fish, which they caught with nets. The mines produced between \$200,000 and \$300,000 the first season, and in the winter of 1887 there were about 115 men in the district. Forty Mile district has been very productive, nearly every creek that has been prospected thoroughly yielding gold in paying quantities.

Franklin Gulch has produced a great deal of gold and is still yielding good returns. In 1888 about 100 men, working on the bars, took out from \$2,000 to \$3,000 apiece.

In 1893 Miller Creek, which has been the best producer in the district, yielded about \$300,000, a space of ground 30 by 100 feet having produced \$35,000. It has continued to yield large returns, John Miller having taken \$55,000 from his claim during the season of 1896. This creek is a tributary of Sixty Mile Creek, but is in the Forty Mile district. During the seasons of 1896 and 1897 quite a number of men took out from \$3,000 to \$8,000 apiece on Miller Creek.

Glacier Creek, so named from the glacial formation, is a comparatively rich creek, but great difficulty has been encountered in working the claims on account of the ice. The creek bed is practically a glacier, the water in many places running through solid blue ice.

Walker's Fork and Napoleon and Davis creeks, all tributaries of Forty Mile Creek, have many good claims.

Chicken Creek, which was discovered two years ago, and which is in American territory, is the best creek in the district. It enters Forty Mile Creek about 150 miles above its mouth. The ground is rich, but irregular, and consists of both winter and summer diggings. The claims on Chicken Creek are 1,320 feet long, but on all other creeks in the district claims are 500 feet long, local mining regulations prevailing. Fifteen men are working on the creek this winter (1897-98).

At the time of the strike in the Klondike there were between six and seven hundred men in the Forty Mile district, most of whom had deserted the creeks and gone to the new gold fields by spring, there being now only thirty or forty men working in the district. There are many creeks that can be worked profitably with wages at \$10 a day. Those claims which are being worked at present are operated on the basis of \$1.50 per hour, as men can not be secured for less wages. The cost of living in the mines is practically the same as in the Klondike district, the charge for summer freighting to the mines ranging from 40 to 50 cents a pound, according to distance, and from 8 to 10 cents for winter packing. The trail, like all trails in this country, is indescribably bad.

As is the case throughout the mineral zone, which extends for 1,000 miles through the Yukon basin, there are many creeks in this district which can not be worked profitably under present conditions, but which will furnish employment to thousands of men for a long period of years when improved transportation facilities enable them to procure supplies at reasonable prices. This is especially true of the North Fork of Forty Mile Creek and its tributaries, all in American territory, where there

are large areas of placer ground that will yield from \$7 to \$10 a day to the man, and which under the application of hydraulic processes will eventually produce many millions. There is also a great deal of quartz of a very promising character on the North Fork. A conservative estimate of the output of Forty Mile district to date places it at \$3,000,000.

The town of Forty Mile occupies a level tract of land on the west bank of the Yukon and the south bank of Forty Mile Creek, and faces both streams for a distance of half a mile or so. The site is a most eligible one, having perfect drainage, the only drawback being that at the highest stages of water it is liable to overflow in places to a depth of a foot or more. The town contains about 200 cabins and twenty or thirty larger buildings, a few of which are two stories in height. The store and warehouses of the Alaska Commercial Company are the principal buildings in the place, and the company has a large and comfortable two-story house, used as living quarters by their employees. In the fall of 1896 the town had a population of about 500, but by spring nearly all had gone to the Klondike, and the white population at the present time does not exceed twenty-five or thirty.

A mile above the town is situated the mission of the Church of England, in charge of Bishop William Bompas, who established the present mission in 1892. Previous to his arrival here the bishop was engaged for over twenty years in missionary work among the Indians on Mackenzie River. He has a corps of assistants, and is doing good work among the native and half-breed children, having a school with ten or fifteen scholars in daily attendance.

On the opposite side of Forty Mile Creek, facing the Yukon, is located Fort Constantine, the headquarters of the Northwest mounted police, which was established in 1895. The post at the present writing is garrisoned by about twenty members of the force. The barracks consist of a half dozen substantial buildings, forming a hollow square, and are surrounded by a high stockade.

A quarter of a mile farther north, fronting on the Yukon, is Fort Cudahy, the headquarters for this section of the North American Transportation and Trading Company. The buildings are the largest and finest on the river, with the exception of the new establishments of the two commercial companies at Dawson.

Both companies have very meager stocks of goods at Forty Mile, having been unable to furnish their regular customers with full outfits for the winter, many being forced to go down the river for provisions. This is no new state of affairs here, there having been a shortage of supplies, more or less serious, every year since the settlement of the district. In 1889 ninety-two men were forced to leave Forty Mile for the winter on account of the scarcity of provisions, taking passage October 10 on the steamer *New Racket* (now known as the *Pelly* and in retirement at Fort Selkirk) for various points below. Some stopped at Rampart City and others at Nulato, while the majority went all the

way to St. Michaels, spending the winter there and returning on the first boat in the spring, being obliged to sled sixty or eighty miles to get to the steamer. Thirty-five men wintered on Forty Mile Creek and its tributaries. An old pioneer who passed the winter there furnished the following statement: "I left the post for Franklin Gulch in the fall with fifty pounds of flour. Some men had from two to three hundred pounds of flour, but that was far above the average, and we had to stint ourselves. The winter was mild, 64 degrees below zero being the lowest temperature recorded. The hunting was good, and we had plenty of moose and caribou; so there was not much suffering. We had no lights, no candles, and no oil. We were fortunate in having a good supply of ruta-bagas, grown at Forty Mile post during the previous summer. They cost us 10 cents a pound there, and we paid 10 cents a pound to get them up."

Wages in Forty Mile are \$10 a day for all kinds of labor. Before the Klondike strike wages were \$6 a day in town and \$10 in the gulches. Wood costs \$24 a cord, ready for the stove. Prices in the stores range about the same as at Dawson, with very few exceptions.

The town of Forty Mile is in Northwest Territory, but up to 1896 it was supposed by the miners that all of the principal creeks in the district were in Alaska. In the winter of 1895-96 Mr. William Ogilvie, the surveyor for the Dominion Government, completed the survey of the boundary line in this vicinity, the result of which showed that many of the best creeks are in Northwest Territory. The following notice, issued on the completion of the survey, is self-explanatory:

Notice is hereby given that the following gold-bearing creeks, or parts of creeks, have been found by astronomical survey to be within the Dominion of Canada, and therefore subject to Canadian jurisdiction and the laws of the Dominion of Canada:

Gold Creek.

Glacier Creek.

Miller Creek.

All but one mile of Bedrock Creek.

Moose Creek.

First fork of Moose Creek.

Twenty-three miles of Forty Mile River.

One mile of the three heads of Smith Creek.

One mile of the several heads of Canyon Creek on the east side of the main stream.

About one mile of Davis and Poker creeks, branches of Walker Creek.

The boundary line has been plainly and unmistakably marked by cutting through the woods down to and up from the creek beds to the hilltops, and on the hilltops and other points where stones were convenient cairns of stone are erected, with stakes in them, to mark that portion of the line.

Dated at Fort Constantine this 15th day of May, 1896.

C. CONSTANTINE,
For Dominion Government.

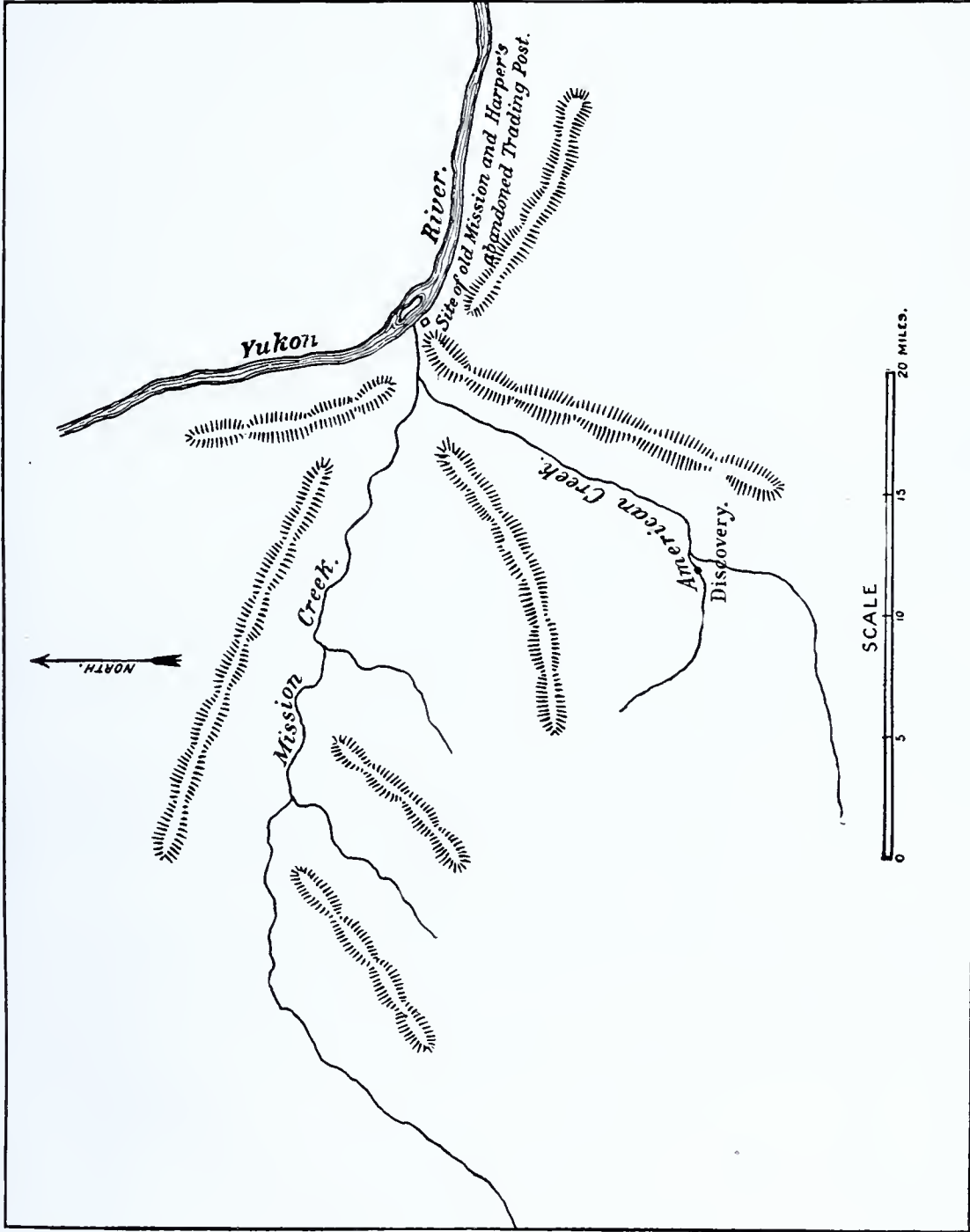
Mr. Ogilvie's determination of the boundary line is accepted by the miners of the district as final.

AMERICAN CREEK, SEVENTY MILE CREEK, AND MINOOK CREEK DISTRICTS.

In 1895 gold was discovered on American Creek, a tributary of Mission Creek, which enters the Yukon from the west forty-five miles below Forty Mile. American Creek, which is about twenty miles long, flows into Mission Creek from the south at a point two miles above the Yukon, and is in American territory. The original discovery was made about six miles above the mouth and the creek was located to the forks, six miles above Discovery. (a) It was found impracticable to work the main creek on account of the difficulty of controlling the water, several washouts occurring during the early summer. It was therefore abandoned, and both forks were located for a distance of four miles above their confluence. The claims on American Creek are 1,320 feet long, and during the past season seven of these were worked, almost exclusively by the owners, only two or three men being employed for wages, which were \$15 per day. The yield was about \$20 a day to the man, and the creek produced between \$15,000 and \$20,000. On the main creek, from the mouth to the canyon, a distance of four miles, the ground is about six feet deep, but above the canyon it is shallower, running from two to four feet. The main creek for its entire length gives promise of proving very productive under hydraulic processes. On the benches there are gravel banks 200 feet in depth, which show colors wherever prospected. There is an abundant supply of water and good grade and dump. American Creek gold is worth \$18.85 per ounce.

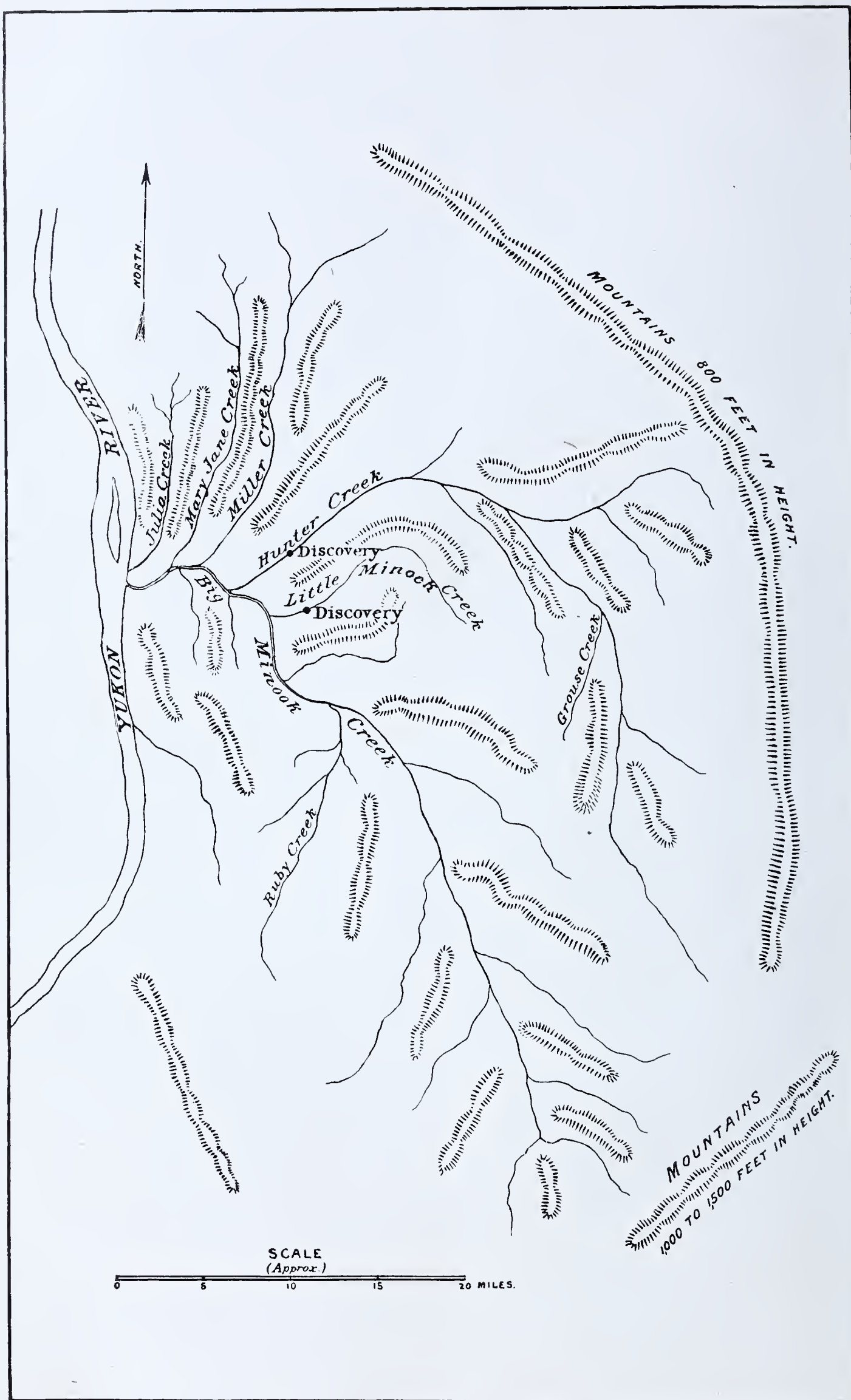
Seventy Mile Creek, which is about 150 miles long, flows into the Yukon from the west, seventy miles below Forty Mile, from which fact it takes its name. Gold was discovered on this creek in 1887, at a point about thirty-five miles from the mouth. During the summer of 1888 several men took from the bars, with rockers, \$50 a day apiece. Fifteen men were employed there last summer, and they report good results, probably averaging \$2,500 apiece for the short season. It is very difficult to get supplies into the Seventy Mile diggings during the summer, owing to numerous falls and rapids in the creek, which make it almost impossible to ascend it in boats and necessitate the packing of provisions over a bad trail. The miners, therefore, sled their supplies up during the winter. The claims are 1,320 feet in length, and the creek is located for a distance of five or six miles. There are also a few locations ninety miles from the mouth. The creek and its tributaries have merely been prospected in the most superficial manner, but enough is known of the locality to justify the prediction that it will eventually prove, under hydraulic methods, one of the most productive

a This does not agree with the accompanying map, but the author who furnished both map and text being still in Alaska it is impossible to reconcile the differences. The map, however, is believed to be correct.



AMERICAN CREEK DISTRICT, ALASKA.





MINOOK CREEK DISTRICT, ALASKA.



CIRCLE CITY, ALASKA.
(The three parts united form the complete picture.)

districts on the Yukon. There is a great deal of quartz on the head waters, in the zone which extends across the divide from the North Fork of Forty Mile.

Minook Creek, which flows into the Yukon from the south fifty miles above the Tanana, was discovered in 1894. The best ground in the district, so far as known, is located on Hunter Creek, which comes into Minook from the east about five miles above its mouth. Hunter Creek is located for about fifteen miles. Little Minook Creek, flowing into Minook Creek a mile above Hunter Creek, is located for three miles. The claims are 500 feet long on all creeks except Little Minook, where they are 1,000 feet. Very good reports have been received from the Minook district, but no authentic information is at hand as to the value of the prospects. Some sales of claims at prices as high as \$5,000 apiece have been reported. A large number of people stopped off at Minook during the past summer on learning of the shortage of provisions at upriver points, and many returned to that place from Fort Yukon. There are about 500 men spending the winter there, and it is probable that by spring it will be known definitely whether the district is as rich as the rumors indicate it to be.

CIRCLE CITY AND THE BIRCH CREEK DISTRICT.

Circle City, the most important town in northern Alaska, is situated on the west bank of the Yukon, about eighty-five miles in a direct line from the boundary between American and British territory, the distance to the boundary line by way of the river being 205 miles. The Yukon Flats stretch away to the northwestward 400 miles, having a uniform width of about the same distance, and presenting an almost unbroken expanse of hills and prairies as large as the States of Illinois and Indiana. The town is the distributing point for supplies for the Birch Creek mines, the richest and most extensive placer diggings in Alaska. It is the best built town on the Yukon, having about 300 comfortable cabins and quite a number of two-story buildings.

The Alaska Commercial Company has a large establishment here, consisting of a store building two stories in height, 30 by 52 feet, constructed of logs; two warehouses, one 30 by 100 and the other 50 by 100 feet, both being built of corrugated iron, and a log dwelling house.

The North American Transportation and Trading Company, which located here in 1895, also has fine buildings, the store being a sawn-log structure 22 by 70 feet. Three warehouses are owned by the company, one 24 by 70 feet, built of rough lumber, and the other two 30 by 72 feet each, constructed of corrugated iron. One of the latter is still without a roof, the carpenters having deserted the work in the latter part of September, 1896, to go to the Klondike. Their dwelling house, the best building used for the purpose on the Yukon, is a structure of sawn logs 30 by 40 feet and two stories in height, costing about \$7,000.

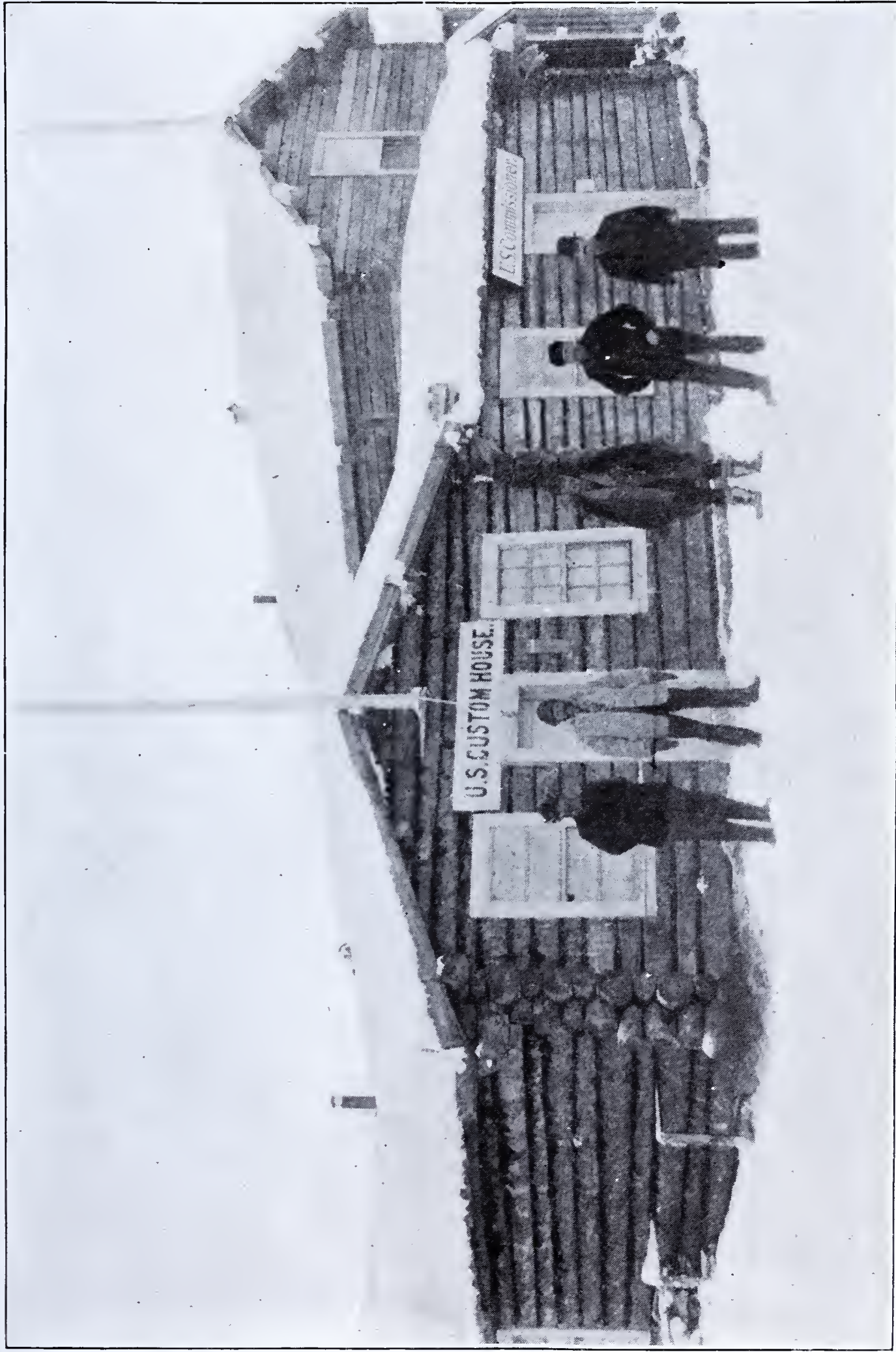
There is a log schoolhouse, 24 by 32 feet, which was built in 1896 by the citizens through private subscription, at a cost of \$1,600. During the winter of 1895-96, before the construction of the schoolhouse, a teacher was employed by the citizens at a salary of \$100 a month, the school being held in a rented building. Last winter school was conducted in the new building by the Government school-teacher, there being from twenty-five to thirty scholars in attendance, four of whom were white, six or eight half-breed, and the remainder Indian children. On account of the depopulation of the town, through the stampede to the Klondike, the teacher was withdrawn during the past summer, and the town is now without a public school, although there are some twenty children of school age here. A number of these are cared for by the Episcopal Mission, in charge of Rev. J. L. Prevost and his wife, assisted by Miss Elizabeth Dean, deaconess. This mission is doing good work among the native and half-breed children, and the influence of its missionaries is felt throughout the community. Religious services are held at the mission every Sunday morning, with a fair attendance.

Last spring Hon. John E. Crane, of Chicago, was appointed United States commissioner for the district of Alaska, and assigned to duty at Circle City. He arrived here in July, and qualified October 2, 1897, giving to the community its first taste of judicial authority.

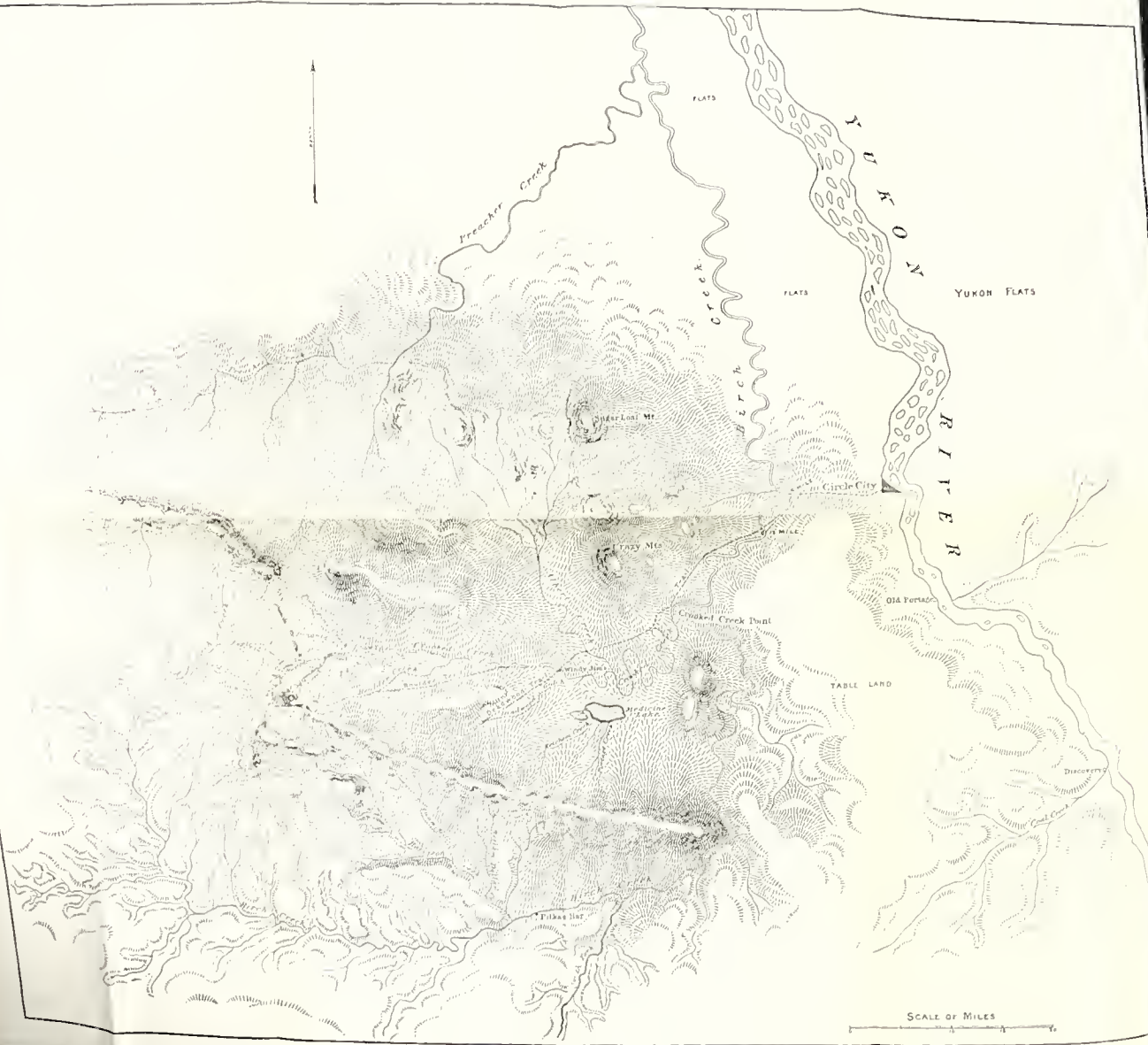
In addition to Commissioner Crane the Government is represented here by the following-named officials: Charles Smith, deputy collector of customs; Charles I. Roth, inspector of customs; Capt. George W. Dunn, deputy United States marshal; J. R. Dodson, deputy collector of internal revenue, and L. N. McQuesten, postmaster. The Government buildings at Circle City are shown in the illustration.

The town site of Circle City was staked on June 20, 1894, by Robert J. English and Barney Hill, the former from Forty Mile and the latter from the temporary trading post of McQuesten & Co. These gentlemen had visited the Birch Creek mines, and being impressed with their richness and extent decided to locate here, considering it the most eligible point from which to distribute supplies to the mines. The town was given the name it now bears under the false impression that it was on the Arctic Circle. As subsequently learned, it is about forty miles south of the circle.

McQuesten & Co. had established a trading post the previous summer on the Yukon, about twelve miles above the present site of the town, and removed to this point in the fall of 1894. Mr. L. N. McQuesten, the senior member of the firm, and in charge of the business here, had so much faith in the new gold fields that he gave credit to the miners to the extent of about \$100,000 during the winter of 1894-95. Most of the stock was at Forty Mile, and the miners were obliged to go to that place for their outfits or have them freighted down at a cost of \$12 a ton. The mines turned out so well that the firm collected practically all of their bills during the fall of 1895. Mr. McQuesten, who is



GOVERNMENT BUILDINGS, CIRCLE CITY, ALASKA.



known throughout the Yukon Valley as "Jack" McQuesten, has been in business on the Yukon since 1873, in which year he came over the mountains from the Mackenzie and down the Porcupine. He traded with the Indians on the lower river for some years and then located at old Fort Reliance, six miles below the Klondike, where he remained until 1885. In 1886 he established a trading post on Stewart River, and spent the winter of 1886-87 in California, receiving while there news of the discovery of gold on Forty Mile Creek the previous summer. He returned in the summer of 1887 and established a trading post at Forty Mile, where he has continued in business until the present time. In 1896 the Alaska Commercial Company assumed control of the establishments at Forty Mile and here, Mr. McQuesten retaining an interest in the business. Mr. McQuesten is spending the present winter in California. He is a native of Maine, and is a typical frontiersman, standing over six feet in his moccasins, and being built in proportion. He is beloved by the miners, and is called by them the "Father of the Yukon." They bear universal testimony to his large-hearted generosity and attribute the development of the Yukon gold fields to his farsightedness and his unselfishness in giving them credit, thus enabling them to tide over bad seasons.

Birch Creek is about 350 miles long. The North Fork has its source in the Ratzel Mountains, 100 miles west of Circle City, flowing to the southward some fifty miles, and then to the eastward eighty or ninety miles, completing as Birch Creek proper an almost perfect semicircle at a point eight miles west of Circle City, and thence flowing parallel with the Yukon for 150 miles, emptying into the latter stream thirty miles below Fort Yukon. The South Fork, flowing in a northeasterly direction, unites with the North Fork sixty miles southwest of Circle City.

The first discovery of gold by white men in the Birch Creek district was made on August 10, 1893, at a point on Birch Creek a few miles west of the mouth of South Fork, now known as Pitka's Bar. The discovery was made by Henry Lewis, John McLeod, and Gus Williams, who had come down from Forty Mile during the preceding month with a view of prospecting in this locality, having learned that an Indian named Pitka had taken out some gold at the point above named during the summer of 1892. Twenty-five or thirty men from Forty Mile followed Lewis and his companions during the fall of 1893. During the spring of 1894 \$10 a day to the man was made on Pitka's Bar. On June 15 of the same year a discovery was made on Mastodon Creek by Pat. J. Kinnaley and John Gregor, and on the 22d of that month good ground was found on Independence Creek by some of the men who had come down from Forty Mile the previous fall. The discoveries on Mastodon and Independence were creek diggings and the claims there have proved very productive.

Mastodon is the best creek in the district, having yielded more than one-half of the total product of the Birch Creek mines, and will soon

become known to the world as one of the richest placer gulches ever discovered. There are fifty-nine claims on the creek, but many of them are lying idle on account of the difficulty in getting miners. The output last summer was \$260,000, eighteen claims being worked, with 260 men employed. The period of active mining operations was about sixty days. The claims could have been worked longer, but as soon as the miners accumulated a "grub stake" they left for the Klondike and elsewhere to prospect. There is an abundance of water on the creek, it never getting below a sluice head. Mastodon has been known locally for two or three years to be the best creek in Alaska, but until the past fall it had not been thoroughly enough prospected to warrant a positive statement as to its richness and extent. Eight holes have recently been sunk to bed rock on Discovery and No. 1 above, which show an average of ten feet of gravel that will run 25 cents to the pan, as high as two ounces having been taken out of a single pan. The pay streak is 1,100 feet wide, so far as known, and may be much wider. These two claims will run from \$1,700 to \$4,000 to the box length. Active developments on the claims above and below Discovery indicate that for two miles the pay streak runs from 800 to 1,000 feet wide and that the ground for this entire distance will average \$1,700 to the box length. The prediction is here made, based on authentic information, that the ten miles of ground on Mastodon and Mammoth (which are one creek except in designation) already prospected will eventually produce as much gold as any successive ten miles on Bonanza, while the ten claims on Mastodon, from 4 below to 5 above Discovery, inclusive, will without doubt prove as productive as any ten claims on Eldorado, taken in their numerical order. Furthermore, on account of the even distribution of the gold in the Birch Creek district, the output here, extending over a longer period of time and employing larger numbers of men, will be of incalculably greater economic benefit to the community than the more phenomenal production of the creeks in the Klondike district.

Independence Creek has twenty-nine claims, which yield about an ounce per day to the man. The creek was not worked extensively during the past season, as miners could not be secured, only two or three claims being operated, with seven men employed, and producing about \$7,000.

Mammoth Creek, which is formed by the junction of Mastodon and Independence, and empties into Crooked Creek, is about five miles long. This creek, which was discovered in 1894, has been opened in three different places, and paid \$8 to the man, shoveling in. It was abandoned and relocated for hydraulic operations. Capt. John J. Healey owns two claims on the creek, Henry Lewis four, and Kinnaley & Gregor seven, all of twenty acres each. There is an ample supply of water, with good grade and dump, and when hydraulic machinery can be procured the creek will be a great producer.

Deadwood Gulch, located in 1894, has forty-seven claims, eight of

which were worked during the past summer, employing 110 men and yielding about \$100,000. The pay streak is about thirty feet wide, and although somewhat spotted, the ground is very rich.

Miller Creek has sixty-four claims, nine of which were worked last summer, producing \$30,000. Forty men were employed for about sixty days to secure this output.

Eagle Creek, discovered in 1895, has forty-six claims, only four of which were worked during the past summer on account of the scarcity of miners, producing \$75,000, with seventy-five men employed. All of the claims on this creek can be worked profitably at the prevailing rate of wages. Owing to the difficulty of reaching Eagle Creek with supplies, \$12 a day is paid for labor there, \$10 being the rate of wages on all of the other creeks in the district.

Gold Dust Creek has sixty claims, all of which were abandoned during the Klondike stampede. These were all subject to relocation during the past fall, and have been restaked.

Harrison Creek is thirty miles long, and contains about 100 locations, the claims being 1,320 feet long. It has been relocated, and would have been worked during the past season if it had not been for the stampede. There is probably not a claim on the creek that would not yield \$8 to the shovel under present conditions, and as there is an ample supply of water and good grade it will eventually produce many millions under hydraulic processes.

Porcupine Creek is about the same length as Harrison, and in 1896 had quite a number of claims 1,320 feet in length, having been located for hydraulic purposes. It was abandoned, and is subject to relocation.

Lower Coal Creek, on which a discovery was made in 1895, enters the Yukon from the west, fifty miles above Circle City, and is about thirty miles long. There were fifteen or twenty 1,320-foot claims on the creek in 1896, but they were abandoned, and are now subject to relocation. There is a fine vein of bituminous coal on this creek, three miles from the Yukon. The coal burns well, producing a fine ash, entirely free from clinkers, being far superior to the Puget Sound coal brought into the country by the transportation companies.

The claims on Mammoth, Harrison, Porcupine, and Lower Coal creeks are 1,320 feet in length, having been located under the United States law for hydraulic purposes, but all the other creeks in the district have claims of 500 feet, the limit prescribed by the local mining regulations. As the United States law now prevails in the district, it is probable that henceforth locations on newly discovered creeks will be for the full twenty acres allowed under the law.

There are a large number of creeks in the Birch Creek district which run from \$6 to \$10 per day to the man, and which, of course, can not be worked at the prevailing wages and under present processes, but which can be profitably operated by means of hydraulic appliances.

The gold produced by the Birch Creek mines is very coarse, many

nuggets running from a quarter of an ounce to four or five ounces having been secured. The quality of the gold is better than that of any other district on the Yukon, with the possible exception of Minook, running from \$16 to \$19 per ounce, Eagle Creek gold assaying up to the last-named figure. The average for the district is about \$17.20 per ounce, while the average for the Klondike falls below \$16, Eldorado gold, which contains much silver and base material, running but \$15.25.

The ground in most of the gulches is quite shallow and easily worked; but on Mastodon, Independence, and one or two other creeks there are also good winter diggings, and drifting is carried on there actively during the cold weather.

Preacher Creek, which enters Birch Creek about sixty miles from Circle City, is 150 miles in length and has been prospected but little. Mr. Wilson, in his Guide to the Yukon Gold Fields, makes the following interesting statement relative to this creek: "The creek was named after a preacher who made an exploration trip of some length in search of fossils. It is reported that he found high clay banks some seventy miles from its mouth. These banks were about 300 feet high and overlaid a layer of driftwood some 200 feet down. Much of this driftwood was well preserved and of much larger dimensions than any growth in the country at present, some of the trees being fully four feet in diameter. The creek is constantly undermining its banks, thus bringing down great slides of clay and wood which completely fill the creek at times. This goes to prove beyond a doubt that the great Yukon Flats were at one time a vast lake, much larger than any fresh-water lake existing to-day."

The mines are from forty-five to eighty miles from Circle City, and the trail, which crosses Birch Creek about eight miles from town, thence following that stream and Crooked Creek to the mines, is almost impassable in the summer time. The description of the Bonanza trail, given in the section on the Klondike, applies equally well to the Birch Creek trail, with the addition of the reluctant admission that the Birch Creek mosquitoes are somewhat larger and incalculably more numerous than the Klondike variety—a fact ascertained by taking the consensus of opinion of a number of unfortunates who have been tortured by both. The rate for summer packing to Mastodon (sixty-five miles) is 40 cents per pound, the winter rate being 15 cents. Dog teams make the round trip in five days, the sleds being loaded with 200 pounds to the dog. The winter trail is generally open by the 15th of October, and sledding lasts until about the 10th of May. Previous to the Klondike stampede thirty or thirty-five horses were used for packing to the mines, but they were withdrawn for freighting between here and Dawson and have not since been in use on the Birch Creek trail.

At the time of the Klondike strike there was a population of about 1,000 in Circle City and the Birch Creek district and the town was in an exceedingly prosperous condition. The mines had produced nearly

\$1,500,000 during the season of 1896 and as a consequence money was plentiful. All lines of business were doing well and twelve saloons were in full blast. When the news of the great strike reached Circle City nearly everybody caught the Klondike fever. Saloon keepers closed their saloons, gamblers folded up their lay-outs, carpenters dropped their tools in the midst of their work, and all rushed off to the new diggings, many neglecting even to lock their cabin doors. During the winter some eight or nine hundred men took their departure for Dawson and by late spring there were not more than fifty people, mostly women and children, left in the town. A few went up on the last steamer, but the vast majority were obliged to make the journey on the ice. As heretofore stated, there were about thirty-five horses in the district, employed in packing to the mines, and these were pressed into service, sleds being used to carry supplies. Dog teams were secured when obtainable, the price of dogs ranging from \$100 to \$200 apiece, while some drew their sleds themselves. The distance of 300 miles was usually made in from 20 to 30 days. The rate for freighting from Circle City to Dawson during the winter was \$1 per pound.

A number of old Birch Creek miners have struck it rich on the Klondike, but many of the unsuccessful ones have returned to Circle City, and more will follow during the winter, their disappointment tempered by an abiding faith in the future of the Birch Creek district. Careful inquiry has elicited a fact which is too significant to be omitted in this connection. Of the first half million dollars in gold dust put in circulation in the Klondike district, fully 80 per cent was carried there by miners from Forty Mile and Circle City, by far the larger proportion having been taken from this place by successful Birch Creek miners for investment in Klondike properties. A conservative estimate of the total output of the Birch Creek district places it at \$3,500,000.

As the Government had never considered this section of Alaska of sufficient importance, up to the past summer, to give it a judicial officer to administer the laws, the citizens were forced to take the matter into their own hands. When an infraction of the law was committed a miners' meeting was called to try the offender. A chairman and jury were selected by ballot, the defendant being allowed to choose an attorney and to challenge for cause, and the proceedings were conducted as nearly in conformity with the rules of law and evidence as the somewhat limited court experience of the participants would permit. This temporary organization was in no sense a vigilance committee, no occasion ever having arisen here for the formation of such a body. There is no town of its size in America that has a better record than Circle City as a law-abiding, justice-loving community. During the three years and a half of its existence there have been but two homicides committed, one of which was clearly in self-defense, and there have been but two trials for theft. The punishment prescribed for murder was hanging, and the penalty for theft was immediate departure from

the country, never to return on pain of death, the miners themselves furnishing the means of transportation and subsistence to the coast. There have been one or two trials for infraction of the moral law, which resulted in each case in exact justice being meted out. The citation of one case of this kind will furnish a striking illustration of the effectiveness and celerity with which a Circle City miners' meeting could repair a wrong done to a helpless woman. The plaintiff charged the defendant with seduction under promise of marriage. The case was tried with due formality, after the exclusion from the room, on the motion of a considerate miner, of "all children of tender age." At 5 o'clock in the evening of the second day of the trial the jury brought in the following verdict:

We, the undersigned jurors, in the case of Alice Doe, plaintiff, and Richard Roe, defendant, find the defendant guilty as charged, and order that said defendant marry Alice Doe, or, in failure to do this, he be fined \$1,500 and imprisoned one year in a prison in Circle City, and, in case of failure to pay the said fine, the term of imprisonment be extended to two years; and it is further ordered that the defendant be immediately placed under arrest and placed in charge of the bailiff until the conditions of the verdict are complied with.

The meeting then adjourned for two hours. On the reassembling of the meeting at 7.30 the chairman stated that the marriage contract had been witnessed, and that the jury and all officers connected with the case were honorably discharged, and after the adoption of a motion tendering a vote of thanks to the ladies of Circle City for the support and assistance given the plaintiff during the trial, the meeting adjourned. When it is considered that at the time of this meeting there was no jail in Circle City, and that if the defendant had chosen the alternative of imprisonment the expense of providing a jail and maintaining the prisoner for two years would have fallen on the miners themselves, not only the Draconian justice of their action, but their self-sacrificing devotion to principle becomes apparent.

The following succinct entry from the records of Circle City indicates how easy it was for a miners' meeting to settle a dispute as to the ownership of property:

Meeting, September 20, 1896. *Stella Wingood v. Mr. Holden.*

Miss Stella Wingood states that Mr. Holden has her clothing and refuses to give it up. Chair appoints Mr. Lester to bring Mr. Holden before the meeting. Mr. Holden sent word that he would not come. Moved and seconded that a committee of three be appointed to demand Miss W.'s clothing from Mr. Holden. Carried. Also that lady should accompany the committee and demand her clothing. Carried. Committee reports that the clothing has been returned. Adjourned.

During the past summer a United States commissioner took up his residence in Circle City, qualifying in October, and the miners' meeting, which all must admit had its good points, has given way to formal judicial proceedings.

The absence, prior to the past summer, of any functionary qualified

to solemnize a marriage contract caused some inconvenience, but the following marriage agreement, duly signed and witnessed, satisfied all concerned:

This agreement of marriage, made and entered into this 3d day of August, 1896, by and between Richard Roe, of Circle City, Alaska, and Mamie Doe, of the same place, witnesseth: That whereas the parties hereto are desirous of entering into the marriage relation and there is no officer or minister or other person competent or authorized to solemnize a marriage in Circle City, Alaska, or in any place accessible thereto: Now, therefore, in consideration of the mutual promises of marriage heretofore made by and between us and each of us, we do hereby mutually and severally agree to and do enter into the marriage state, I, the said Richard Roe, hereby agreeing to take her, the said Mamie Doe, as my lawfully wedded wife, and I, the said Mamie Doe, hereby agreeing to take him, the said Richard Roe, as my lawfully wedded husband.

The most important institution in Circle City is the Miners' Association. This is a beneficial organization of the miners of the Birch Creek district, whose object is the relief of members in sickness and distress. The present membership is 225, but many of the members are absent, on the Klondike and elsewhere. The initiation fee is one ounce of gold (\$17), and the dues are \$1 per month, any extraordinary expenditure being covered by a subscription. This organization takes the lead in all works of charity. During the latter part of October, 1897, a large number of men coming from Dawson in small boats were caught in the ice at various points above here, and in several cases had their feet badly frozen. When such a case was reported the Miners' Association would immediately organize a relief party, hire a dog team at \$50 a day, and have the unfortunate man brought into town, the expense being paid through a subscription. The association has a library of about 1,000 volumes which would serve as a model, in the class of books it contains, for any community in the country. All the standard novelists and poets are represented, while the complete works of Huxley, Darwin, Tyndall, Carlyle, Prescott, Macaulay, Hume, Motley, Ruskin, Irving, and many others have place on the shelves. Some of the standard illustrated papers are kept on file, and chess and checker boards are at the disposal of the members. A fine morocco-bound quarto Bible has the place of honor on the reading table. The seeker for scientific facts and miscellaneous information has access to the Encyclopedia Britannica, while the letter writer in quest of superlatives to describe to his friends at home his unique surroundings has at hand the latest edition of the International Dictionary. The library is largely drawn on by the residents of the town, who are permitted to withdraw books on the payment of a small fee. Calling recently at a cabin occupied by three miners, the writer found one of them reading Bourrienne's Napoleon, another Kinglake's Invasion of the Crimea, while the third was devouring Trilby, dropping an emphatic remark now and then which indicated that the passages in French met with his disapprobation.

The association is accomplishing much good in the community through the educational influence of its library and the model conduct of its members. As before stated, it is purely a beneficial organization and has nothing whatever to do with miners' meetings, so called, except as its members participate therein as individuals.

About the middle of September, 1897, the situation in regard to the food supply for the winter became critical, through the announcement of Capt. J. E. Hansen, assistant superintendent of the Alaska Commercial Company, while en route from Fort Yukon to Dawson, that no more freight would be left here during the season, and the statement of the local agent of the North American Transportation and Trading Company, that while the orders of their regular customers would be filled no surplus provisions could be landed by their boats. The companies took the position, in view of the serious shortage of provisions at Dawson, that it was their duty to the people there to carry as much freight as possible to that place, stating that the people of Circle City, being only eighty-five miles from Fort Yukon, where there were ample supplies, could freight their outfits from that point. The miners of the Birch Creek district felt that this proposed action of the companies would work a great hardship to them, as it would make it impossible to begin work in the mines until very late in the season, on account of the loss of time in freighting supplies, to say nothing of the additional expense of 20 or 25 cents per pound involved. They were almost entirely destitute of provisions, the companies selling them only enough to last from day to day. This was the condition of affairs on September 19, when a miners' meeting was held to take action in the matter, some forty men being in attendance. At this meeting a committee was appointed to take a census of the people in town and in the mines, ascertain the amount of supplies they would require for the winter, and wait upon the captain of the next steamer on its arrival and require him to land enough supplies to fill their orders. On the 20th forty-three men signed an agreement "to be at the bank of the river on the arrival of the first steamer, to receive orders from the committee appointed to wait upon the captain of said steamer." The census of the people of the district showed that there were 188 men without supplies, and a list was made up by the committee of the amount of provisions that would be required to sustain them during the winter, many of the 188 persons in the meantime filing their orders at the stores.

The steamer *Weare*, of the North American Transportation and Trading Company, arrived on the evening of the 21st. The committee placed an armed guard on the steamer to prevent her departure during the night, and the next morning, with the assistance of their supporters, took from the boat, against the protest of the captain, twenty tons of food supplies. The *Bella*, belonging to the Alaska Commercial Company, arrived on the 25th, and the committee, assisted by the men

who had pledged their support, took thirty-seven tons of provisions from her. A prominent miner who was present during the unloading of the goods from the *Bella* has furnished the following statement: "A committee of five men was appointed to wait on Captain Dixon of the *Bella* and inform him of the situation here with reference to the scarcity of provisions. We had a list of those supplies which we considered absolutely necessary to carry us through the winter, and we submitted that list to him. I believe the list called for sufficient provisions for 188 men, the number at that time known to be in the district without supplies. The captain said that his orders were to leave nothing here, and that he would leave nothing—that if we took anything off we would do it against his protest. We then stationed men at various points—one on the gang plank, one in the store, and one in the warehouse—to see that the goods were properly delivered to the warehouse, and our men went aboard the boat and took off thirty-seven tons. No arms were used and no force was applied. We simply insisted on the company leaving enough provisions to fill our orders. We did not fill our list completely; but we got plenty of flour, bacon, butter, and evaporated potatoes." Capt. P. H. Ray, U. S. A., who was a passenger on the *Bella*, protested against the action of the miners, informing them that it was unlawful. Their spokesman replied that there was no law here; that the Government had failed to place officials here to protect them in their rights, and that they were forced to take the law into their own hands in self-protection. In both cases of the forcible removal of provisions from the steamers the miners requested the agents of the companies to check off the goods as they were placed in the warehouses, and the agents did this, the goods being subsequently sold to the miners, in accordance with the orders which they had placed at the stores, at the companies' prices. The effect of the movement was to compel the companies to supply provisions necessary to subsist the miners during the winter, and there was no confiscation of goods, as has been stated at Dawson. An armed guard, furnished by the miners themselves, patrolled the *Bella*, which lay here all night, to protect her cargo from possible theft by lawless characters.

Early in December a prominent mine owner of the Birch Creek district, who was visiting Circle City, was requested to secure for use in this chapter a copy of the local mining laws of the Mastodon district, and he promised to do so. During holiday week the following letter was received from him:

I sent to the recorder of Mastodon, as you requested, for a copy of its laws, and inclose herewith his reply, thinking it may amuse you, and believing you have too much sense to be offended. The writer is an honest, sensible, hard-working man, and highly esteemed by all who know him, and his note is simply an index of the feeling of distrust with which old-timers, or at least the greater part of them, view Government officials, and the innovations which are taking place in both the mining and civil laws. The few Government officials that Uncle

Sam has sent us heretofore have, it is believed, done little good for the country or the Government, while it is strongly suspected that they have abused the powers of their office by levying blackmail on the commercial companies, saloon keepers, and others. I do not allude to the present officials; they have yet to prove themselves.

It is a pretty general sentiment that the Oregon Code of civil laws and the United States mining law are inadequate to our needs, as our isolated position, short seasons, and severe climate differ from those of any other portion of the United States. Our old system of government, by means of miners' meetings, was on the whole very efficient, and crime was almost unknown. Whether the present system is, or is likely to be, a success, you have an opportunity to judge for yourself.

I inclose herewith a copy of the Miller Creek mining laws.

The following are the laws of Miller Creek:

The recording fee for each location and transfer of claims shall be \$2.50.

Three hundred dollars' worth of work must be done on each claim and in each year. If said amount of work has not been done by the 1st of July in each year, it must be done during that month, or declared vacant. Three inspectors shall be elected to determine whether the required amount of work has been done on each claim, and their decision shall be final.

A fraction of a claim shall do assessment work in proportion to its length.

No claim shall for any cause be laid over for a season.

No claim owner shall ground-sluice stumps or sod onto the claim below him.

Each claim holder is entitled to dump tailings for a space of three box lengths on the claim below him.

The unwritten laws and customs of the Birch Creek district, as near as can be ascertained, are as follows:

A claim consists of 500 feet lengthwise of a gulch and from rim to rim in width.

Each discoverer of a new gulch shall be entitled to an additional 500 feet.

Claims shall be numbered above and below Discovery.

A claim owner is entitled to all of the timber on his claim, but all timber above the rim on the side hill is free for all.

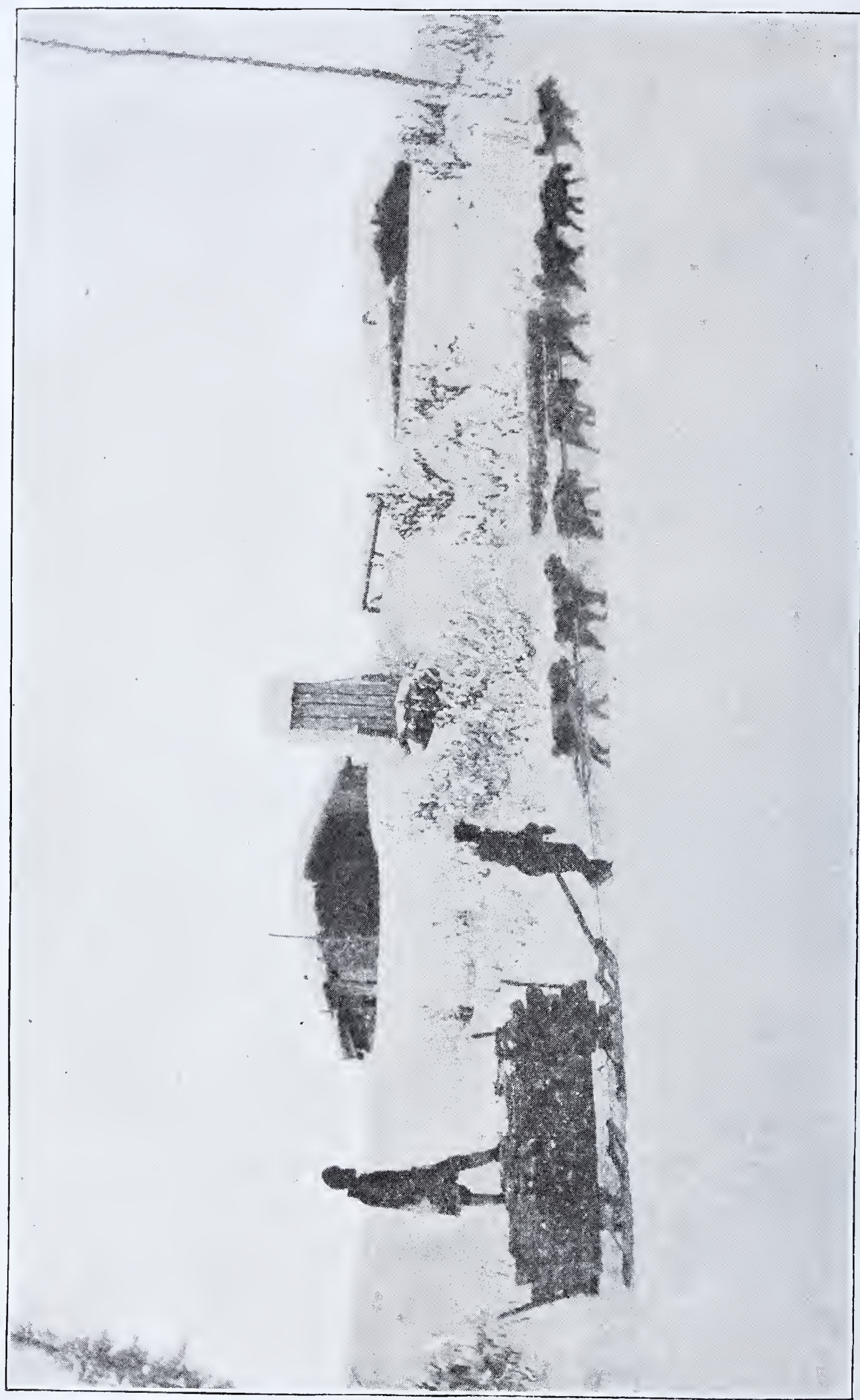
A man is entitled to locate one claim for himself, and for no one else, on each gulch, and having used his right once on a gulch can not do so again.

Previously to recording, provided no vested interests are jeopardized, a locator may cut his name off his stakes and relocate on the same gulch.

An alien is entitled to the same privileges as a citizen in locating and working mining ground.

Nothing in the local mining laws shall be construed to prevent a locator from buying claims.

The custom relative to the rights of aliens originated in the Forty Mile district, where, until recently, there was a local dispute as to the location of the boundary line, the Canadians and Americans agreeing, for mutual protection, to the provision as given above. When the Birch Creek mines were discovered many Canadians came down in the



DOG TEAM, CIRCLE CITY, ALASKA.

stampede from Forty Mile, and their American friends decided in public meeting to perpetuate the custom here.

Wages of laborers in Circle City are \$6 per day, but there is very little employment of any kind to be had, and there are probably 100 idle men in the town who are anxious to work. Clerks in the stores receive from \$75 to \$125 per month and board, the latter salary being paid to bookkeepers.

Prices in Circle City are substantially the same as in Dawson and Forty Mile. Speculative prices are not as high for many articles on account of proximity to the source of supplies, the rate for freight between Fort Yukon and this place being but 25 cents per pound, while it is \$2 per pound from Fort Yukon to Dawson. In some special cases as great prices have been paid here as on the Klondike. Good dogs command from \$150 to \$400 apiece, and in one or two instances \$500 apiece has been offered for very fine dogs, \$4,000 having been offered and refused for the eight-dog team a view of which appears. Whisky is quoted at \$50 a gallon, but can not be had even at that price. Some has recently sold for \$20 per bottle. Unrectified high wines, for which there is an active demand, command \$30 per gallon. Candles are quoted at \$7.50 per box (120) at the stores, but they are scarce, as high as \$30 per box having been paid for them outside the stores. Flour costs \$37 per 100 pounds, the Circle City price with Fort Yukon freight added. Coal oil is quoted at \$1 per gallon at the stores, but commands \$7 per gallon in the hands of speculators. Firewood is \$16 per cord, laid down at the door, with \$5 added for cutting into stove lengths. The dog team shown in the illustration can haul two loads of a cord each per day. While many luxuries are not to be had at any price, there is an ample visible supply of the staples to carry the community through till midsummer; so, although there must of necessity be some privation, there will be no actual starvation, as was freely predicted three months ago by many who now admit they were mistaken.

During holiday week a lunch room was opened in Circle City, with bill of fare as follows: Coffee and sandwich, 50 cents; coffee and pie, 50 cents; coffee and doughnuts, 50 cents; hot cakes and maple sirup, \$1. January 10 the proprietor began serving meals; price, \$1.25.

The Miners' Association of Circle City having expressed a desire to state their grievances against the commercial companies doing business on the Yukon, five questions were prepared, covering the points on which the most general complaint is heard on all hands, and submitted to the association for consideration. These questions and the replies of the Miners' Association thereto are as follows:

1. What reasons have you for asserting that there exists an unlawful combination in the nature of a trust between the companies doing business here?

The facts speak for themselves. They have raised the prices 50 per cent over last year's quotations. They themselves confess to a rise of 20 per cent. The rise is uniform as between the two companies, except when

either is out of an article, and then the other charges whatever price it may see fit. Besides, we have the assurance of Mr. Ely A. Gage, brother-in-law of the president of the North American Transportation and Trading Company, that Mr. Sloss and Mr. Weare had an understanding in Washington as to the policy of their respective companies, so that neither would hurt the other.

2. What proof have you to offer that the companies take advantage of the scarcity of an article to raise the price?

The most prominent freighter here last year stated that he delivered over twenty tons of freight to the different gulches with the advance of 15 cents per pound added on the ground that the goods had to be freighted up from Fort Yukon, when everyone knew that less than 1,000 pounds had at that time been brought from Fort Yukon. It is notorious that it was the policy of the North American Transportation and Trading Company to winter their boat at Fort Yukon, when they might just as well have brought her to Circle City, this course being pursued in order that they might have an excuse to mulct the miners as above stated. Billiard tables, bar fixtures, furniture for houses of easy virtue, and all the paraphernalia that contribute to the consumption of alcoholic liquors, as well as large quantities of liquors, are freighted up the river to the exclusion of necessary food supplies.

3. Is it true that the two companies, or either of them, have refused to sell goods for cash to certain persons for protesting against alleged abuses of power, favoring those who tacitly acquiesce in their action? This matter is so open and notorious that the managers of the companies will not deny that they still maintain that they have the right to sell goods how and to whom they please.

4. Have the companies failed to keep their agreements with the miners? If so, in what respect?

Mr. James M. Wilson, the superintendent of the Alaska Commercial Company, and Mr. George Ellis, representing the North American Transportation and Trading Company, solemnly promised the miners in a public meeting in Circle City that, providing the credit business was discontinued, they would reduce the price of goods $33\frac{1}{3}$ per cent to the miners. Neither company sells anything now except for cash, and, notwithstanding their promise to reduce prices $33\frac{1}{3}$ per cent, they concede to a rise of 20 per cent, but which in reality is over 50 per cent.

5. Are the charges for merchandise extortionate? Give instances.

Siwash tobacco, that costs $8\frac{3}{4}$ cents per pound and sold last year for 50 cents, is now selling for \$1. Rubber overshoes that sold last year for \$2.50 this year sell for \$6. Desiccated potatoes that sold last year for \$14 per can have been sold this year for \$28, or \$1 per pound. Moccasins that cost 50 cents per pair and sold last year for \$2.50 sell this year for \$3.50 per pair. Roast beef that sold last year for 50 cents per can sells this year for 75 cents per can. Tea that costs 13 cents per pound in San Francisco and sold last year for \$1 per pound sells this year for \$1.50 per pound. Pitted plums that cost in the San Francisco market 75 cents per box sell here for \$7.50, and other fruits in proportion. Beans that cost 1 cent per pound on the outside sell for 15 cents per pound here. Butter that sells for $12\frac{1}{2}$ cents in San Francisco sells here for 75 cents per pound. All kinds of drugs are sold at \$1 per ounce, many of the articles sold being bought for 6 and 8 cents per pound on the outside. Calico that costs $4\frac{1}{2}$ cents per yard in San Francisco sells for 25 and 35 cents per yard here, and as no charge is made of less than 25 cents the percentage of profit made on notions ranges into the thousands. We might go on indefinitely; but allowing the most extrava-

gant charges for transportation and handling goods, we maintain that the companies make a profit of 450 per cent on an average over and above expenses.

The steamer *Cleveland* sailed August 5 from Seattle for St. Michaels, chartered by the North American Transportation and Trading Company at \$100 per day, including the pay of the crew. She made one round trip in less than forty days. She brought up 163 passengers at \$200 each, including 150 pounds of baggage, allowing 150 pounds of extra baggage at 10 cents per pound, and unloaded 1,400 tons of merchandise at St. Michaels. This trip cost the North American Transportation and Trading Company \$6,000, including the expenses of subsisting the crew. The receipts from the 163 passengers, including the charges for 20,000 pounds of extra baggage, amounted to \$34,600. Deducting from this amount the \$6,000 expenses to St. Michaels, the company had remaining \$28,600, or \$20.43 per ton, with which to transport the 1,400 tons of freight from St. Michaels to Circle City and Dawson. According to the very best evidence obtainable from river men, the actual cost of bringing freight from St. Michaels to Circle City never has exceeded \$20 per ton; yet the companies, as a preliminary charge, place 8 cents per pound against transportation, when river men, of whom there are many here, are unanimous in agreeing that this is the best river in the world for freighting and that an independent fortune could be made in a single year by laying down San Francisco freight in Circle City at 2 cents per pound. Of course we know that the companies talk about the price they have to pay for wood (\$4 per cord), but we also know that they average 500 per cent profit on the goods they exchange for this wood, reducing the actual cost to 80 cents per cord, not to mention the profitable trading business they do with the Indians along the river.

FORT YUKON AND THE EXODUS.

Fort Yukon is situated on the north bank of the Yukon, about 385 miles below Dawson and ten miles above the mouth of the Porcupine River, just within the Arctic Circle. In the early days the Hudson Bay Company had a trading post here, but the buildings were burned by the Indians many years ago and the post abandoned. During the past season both commercial companies, on account of the low water on the Yukon Flats, were obliged to land several hundred tons of freight at Fort Yukon, and they have erected buildings and established posts there.

Of the five or six hundred men who were forced to come down the river from Dawson about three hundred went to Fort Yukon, where some two hundred and fifty are spending the winter, the others having passed on to Minook and other points on the lower river. Great interest centers in Fort Yukon, as it is the point where the authorities in Dawson assured the thousand or more men whom they attempted to force down the river that there were six or seven hundred tons of food supplies, and where the commercial companies represented to the people of Circle City that they could obtain ample provisions for the winter. The fact is now apparent that while there were fully as many tons of freight at Fort Yukon as stated, more than one-half of it consisted of

whisky, high wines, cigars, tobacco, hardware, etc., and that if the movement to force the people out of Dawson and the effort to induce Circle City to depend upon that source of supply had proved wholly successful there would have been a much more serious shortage of provisions on this stretch of the river than now prevails at Dawson.

Among those who went down the river in October were a large number of men without means, who had received assurances in the speeches made at public meetings in Dawson that they would be provided with supplies at Fort Yukon. On their arrival at that place they found the local representatives of the commercial companies averse to ratifying the assurances made at Dawson, and about the 1st of November an armed mob of seventy men made a demonstration against the caches of the two companies, which are situated about three miles apart. Capt. P. H. Ray, U. S. A., who was at the cache of the Alaska Commercial Company, and who ordered the men to disperse, was held by force until he agreed to accede to their terms—the issuance of a seven months' outfit to every man at Fort Yukon without means. This demand was made for the reason that the companies were selling to each man but ten days' provisions at a time, thus practically holding the people in Fort Yukon in idleness and making it impossible for them to go out prospecting. A committee of seven men was appointed, to which was delegated the duty of passing upon the applications of destitutes for outfits. The methods pursued by the committee were so lax, in the opinion of Captain Ray, who, in the meantime, had organized a civilian force to support him, that he abrogated the powers of the committee, assumed full charge of affairs, and raised the American flag over both caches.

Up to the 1st of December 220 men had been outfitted at the two stores, 130 of these receiving their outfits as destitutes and giving their notes, payable in one year, the Government securing the companies for all bad debts. Captain Ray states that he took this course relative to the 130 men for the reason that, being destitute, they would have to be fed until the opening of navigation. He felt that it would do no good to hold them in Fort Yukon and feed them in idleness, and that by giving them supplies until June 1 they would be enabled to go out prospecting and develop the country. He wished also to avoid, as far as possible, the complications liable to arise among so large a number of idle men, many of whom were desperate over their failure to realize their expectations in the Klondike district. Captain Ray stated, on December 1, that there was a sufficient supply of food at Fort Yukon to support 600 people until June 1. Both caches were out of coffee, tea, and candles, but there was an abundance of flour, bacon, rice, etc., to last even beyond the date named. Cutting wood for the steamboats and prospecting are the only occupations the country affords, and a large number of men are cutting wood and quite a number have gone into the mountains to prospect.

The following is a typical seven-months' outfit furnished by the companies to destitutes:

250 pounds flour	\$25.00
50 pounds bacon	20.00
60 pounds beans	7.20
30 pounds rice	6.00
3 pounds baking powder	3.00
16 pounds butter.....	12.00
2 cases vegetables (2 dozen 2-pound cans).....	20.00
75 pounds evaporated fruits.....	22.50
1 pound soda .....	.50
1 gallon vinegar (or 1½ gallons pickles, at \$2.50)	2.00
50 pounds sugar.....	12.50
30 pounds lard	9.00
2 pounds salt .....	.20
3 pounds coffee	1.50
1 dozen cans condensed milk	5.00
1 case roast beef (1 dozen 2-pound cans)	9.00
1 case corned beef (1 dozen 2-pound cans)	6.00
2 gallons sirup	5.00
10 candles	1.00
Total	167.40

A quotation of the special prices charged for a few sample articles by the North American Transportation and Trading Company at Fort Yukon during the past fall (when the other company was out of them) may be interesting, as indicative of commercial methods on the Yukon: Evaporated potatoes were sold for \$28 per can, the price charged for them by the same company at Circle City being \$14 per can; chewing tobacco, \$2.50 per pound, the Circle City price being \$1; tea, \$2 per pound, the Circle City price being \$1. The explanation given for the special charge for potatoes is that the agent, being a new man and unfamiliar with the company's schedule of fixed prices, inadvertently doubled the price. As to the other items, it is explained that the articles were purchased at the Circle City store at the retail prices there and that the advanced prices were charged to cover 25 cents per pound freight and to meet the requirement of the company that each station shall make a profit on its transactions, a rule which no doubt produces results gratifying to the stockholders, but which works great hardship to the helpless consumer. Some special prices prevail at the Fort Yukon station that are probably more properly attributable to the scarcity of the articles involved than to high freight rates; for instance, 8-inch flat mill files, costing 75 cents per dozen at wholesale and selling heretofore at 75 cents apiece, are sold this winter at \$1.50 apiece, while silk handkerchiefs that cost \$8 per dozen outside are sold to the Indians at from \$5 to \$8 apiece, according to color. A quart of coal oil, the largest quantity sold at one time, costs the consumer \$2.

About the 1st of October, when the Klondike exiles began to arrive at Fort Yukon, there were only two or three log cabins in the place, and

many who were unsupplied with tents were forced to sleep in the open air. During the fall some thirty-five or forty comfortable cabins were erected, and nearly every one is well housed for the winter. Fortunately, the winter so far has been the mildest ever known here, the lowest temperature recorded being 44 degrees below zero and the mercury standing above the zero mark for weeks at a time; consequently, there has been much less suffering than was anticipated.

ALASKA, ITS MINERAL AND AGRICULTURAL RESOURCES, CLIMATIC CONDITIONS, ETC.

One of the best books written on Alaska, and the one which contains the most accurate information relative to the Yukon region, is Victor Wilson's Guide to the Yukon Gold Fields. This gifted author spent the summer of 1894 on the Yukon, and the results of his observations were published in January, 1895, almost simultaneously with his death, the direct outcome of the exposure and hardships of his journey through Alaska. While the book, on account of its hurried preparation, shows some defects, it contains a vast amount of information of remarkable accuracy, presented in a most charming style. Mr. Wilson's work has been used freely in the preparation of this report, not in the appropriation in any reprehensible degree of the material contained therein, but rather as a guide and inspiration in wandering through an almost pathless wilderness of isolated and elusive facts. The liberty is taken of making the following quotation from the introduction to the book:

The rush to the Yukon last spring saw many prospectors in the field with the most promising results. Many new creeks were discovered of great extent and richness, and all the old mines yielded better results than ever before. No creek in the entire basin which was prospected with any degree of precision failed to show at least a color. The estimated amount of gold taken out of the country last year has been placed as high as \$1,000,000, and while this is highly improbable, the many who have returned with amounts varying from \$5,000 to \$35,000 prove beyond a doubt that the country is one of great richness. With these facts fresh before the public, at a time when the brawn and muscle of our great nation is almost at a standstill, it may reasonably be expected that many will turn their attention in this direction, and it is therefore the purpose of these pages to give such information as will be of benefit to those who undertake the trip.

The Chilkoot Pass is the only route used to any extent at present by the miners, and is the shortest portage from salt water to the navigable waters of the Yukon. This route leads over the Chilkoot Pass down the lake to Lewes River, thence down the Yukon to the mines at different points on that river. The trip is one of difficulties, which will tax the endurance and nerve of the most hardy, and only such men can reasonably expect to succeed, for only with the most incessant toil, such as packing provisions over pathless mountains, towing a heavy boat against a five to an eight mile current over battered boulders, digging in the bottomless frost, sleeping where night overtakes, fighting gnats and mosquitoes by the million, shooting seething rapids and canyons, and enduring for seven long months a relentless cold which never rises

above zero and frequently falls to 80 degrees below—any man physically endowed to overcome these obstacles who will go there for a few years can by strict attention to business make a good stake, with the possibilities of a fortune.

The climate is one unequaled for health, the summer months are delightful, game is plenty in season, and the winters, while cold, are healthy and help to recuperate the lost vitality from the incessant toil of the summer.

The next few years will see wagon roads and trails through the Coast Range, steamers on the lakes and upper river, and the whole of the vast upper country will be made accessible to the miner. Then hundreds will flock there, and ten years will see a population of 100,000 people in the Yukon Basin. Then its vast richness will become the by-word of the world, for it is a poor man's country—nature has stored her treasure in a safe of ice with a time lock which opens only in the long sunny days of summer. Hydraulic mining is made impossible owing to the lack of water, for only the glacial drip of the hills is accessible in the gulches which carry the most gold. This will make its period of productiveness much greater, while capital will find lucrative investments in the rich lodes of gold, iron, coal, and copper, and in the bars of the rivers, which have become no longer useful to the pan or cradle in the hands of the miner. All along the whole route from the Coast Range down to old Fort Yukon the close observer can see vast treasures in the mountains—coal, marble, and copper—only waiting for the country to develop to such an extent as to bring them within reach of the outside world.

The country south of the Pelly River is quite well timbered. It is a good grazing country; all the hardy vegetables grow well, and even wheat ripens.

It is a fine game and fish country. Bear of several varieties, moose, caribou, wolves, and many fur-bearing animals abound. It is doubtless the greatest country in the world for the silver and the black fox. The rivers and lakes are teeming with many varieties of fish, while grouse and rabbits are numerous along the shore. Water fowl of many kinds are plenty, and their long sojourning in these inland waters gives to their flesh a flavor which, although high and gamy, never acquires that repulsive, fishy taste so universal to the fowls of this coast.

When once this country is made accessible from the Sound points by proper transportation facilities it can be reached in ten days. Then it will become one of the greatest tourist countries of the world, for where is grander scenery, a more beautiful climate, or a more favored spot than in this lake country during three months in summer? The shores are bordered by strips of green meadow, bedecked with wild roses and an endless variety of flowers of the most delicate tints, while terraced open and timbered slopes stretch away to high mountains, which in turn are backed by snow-capped peaks. During the whole summer scarcely any rain falls, with the exception of an occasional thundershower; the sun is seldom lost sight of, except for a brief period at night.

Within three years it will be possible to leave Seattle in the spring, work in the mines all summer, and return in the fall. Then the importance of these vast gold fields will come to be realized, and in the near future the word Yukon will associate itself so closely with that of gold that its mere mention will convey impressions of an Eldorado, rivaling that of fable.

The foregoing, read in the light of recent events, shows that the writer was endowed with the spirit of prophecy. The following extract

from the introduction to Miner W. Bruce's work on Alaska, published in 1895, indicates that he, too, held substantially the same views in regard to the future of that Territory:

The field is large, and already the dawning of great enterprises fills the minds of ambitious projectors. Gold fields are to be opened up, railways built, possibly with a span of communication with the Old World, besides many other projects which will cause the active American brain to vibrate with new vigor. And if the writer can awaken any patriotic sentiment to further and protect the interests of this grand Territory, he will be satisfied.

He can not consistently advise those seeking a place to make a home, or those looking for a new field of labor, to choose Alaska, unless they have some means, and a reasonable amount of stamina and good health. To any one possessed of these qualifications, he unhesitatingly and unqualifiedly says "Go."

He is in earnest when he says that he believes the next few years will present many opportunities for investment and for laying a foundation for lucrative business enterprises, and perhaps wealth. But if any one expects to acquire these without experiencing the hardships and privations incident to pioneer life, he will be disappointed.

Until the past season, on account of the lack of transportation facilities and the consequent impossibility of bringing mining machinery into the country, but little attention had been given by the miners of the Yukon basin to the subject of the possible discovery and development of quartz ledges. Now that the introduction of machinery within the next two or three years is within the bounds of probability, an active interest is being taken in the search for quartz. It is known to a certainty that many gold-bearing leads, that can be worked profitably under favorable conditions, exist at the head of the north fork of Forty Mile Creek and that they have been traced across the head of Seventy Mile. The great copper belt, which crosses the Yukon at Dawson, extends through Alaska to the Copper River country. This belt crosses the Tanana Valley from 100 to 150 miles from Circle City, and the Indians and a few white men who have been in that country report that native copper is found in large quantities, often in masses weighing from 20 to 100 pounds, in the bed of the streams, indicating beyond doubt that the region is exceedingly rich in copper. The proposed railroad from the head of Cook Inlet or Prince William Sound, referred to in the section on Transportation, would strike the Tanana in the heart of this great copper zone, a fact which effectually disposes of the principal objection to the construction of a railroad into a placer mining country by the assurance of an immense tonnage of return freight to tide water.

During the present winter (1897-98) many prospectors have gone from Circle City to the head waters of the Tanana River, where it is rumored good creeks have been found, and quite a number have gone up the Porcupine from Fort Yukon; so it is quite likely that by the middle of the coming summer it will be definitely known whether there is any truth in the marvelous stories told by the Indians relative to the

richness of those streams. Without regard to new discoveries, however, as stated elsewhere, there are thousands of acres of placer ground in the various districts that will yield fine returns under the application of hydraulic processes, while there are large veins of bituminous coal in many localities that offer attractive inducements to capital.

The Territory of Alaska must necessarily be divided, agriculturally, into three districts, each differing from the other in climate, vegetation, and physical characteristics.

The Yukon district is bounded on the north and west by the Arctic Ocean and Bering Sea, on the south by the Alaskan Range, and on the east by the boundary line.

The Aleutian district embraces part of the Alaska peninsula and all the islands west of the one hundred and fifty-fifth degree of longitude.

The Sitkan district includes all our Alaskan possessions south and east of the peninsula.

The Yukon district is the only one immediately considered in this report, as the interest now centers in that section. The character of the Yukon territory varies from low, rolling hills, fairly easy of ascent and covered from foot to crown with a luxuriant growth of vegetation, to broad, marshy plains extending for miles on either side of the river, especially near its mouth. The rocks vary much, the greater proportion being conglomerate, syenite, quartzite, and sandstone. Trachyte and lava abound in many parts of the valley. The superincumbent soil also differs in some localities, being sometimes sandy and sometimes clayey. In the latter case it is frequently covered with a growth of sphagnum, which causes a deterioration of the soil below it. Over a large extent of country it is a rich alluvium, composed of very fine sand and vegetable matter brought down by the river and forming deposits of indefinite depths, and in such localities fresh-water marl is invariably found in abundance. The soil in summer is usually frozen at a depth of three or four feet in ordinary situations; in colder ones it remains icy to within twelve or eighteen inches of the surface. The layer of frozen soil is usually six or eight feet thick, and below that depth the soil is oftentimes destitute of ice. This phenomenon is undoubtedly traceable to the scant drainage, combined with the non-conductive covering of moss, which prevents the scorching sun of an almost tropical midsummer from thawing out the soil. In places where the soil is well drained and is not covered with moss, as in the large alluvial deposits near the mouth of the Yukon River, the frozen layer is much farther below the surface, and in many places appears to be entirely absent. There is no doubt that in favorable situations, by drainage and deep plowing, the ice can be entirely removed from the ground, and, as will be noticed later on, it is safe to say that this subterranean ice layer is essentially due to the mossy accumulations that are so prevalent in the Yukon territory. It is quite possible to conceive of a locality so depressed and deprived of drainage that the

annual moisture derived from the rainfall and melting snow would collect between the impervious clayey soil and sphagnous covering, congeal during the winter, and be prevented from melting during the ensuing summer by the nonconductive properties of the mossy covering. The lesson that the agriculturist or political economist may learn from this peculiar formation is that a luxuriant growth of vegetation may exist in the immediate vicinity of permanent ice, bearing its blossoms and maturing its seeds as readily and profusely as in situations much more favorable. Hence it is safe to infer that a large extent of territory, embracing millions of acres, long considered valueless, may yet furnish to the settler, if not an abundant harvest, at least an acceptable and not inconsiderable addition to his fare of fish, game, and canned goods.

The climate of this territory in the interior differs from that of the seacoast, even in localities comparatively adjacent, that of the coast being tempered by the vast body of water in Bering Sea, and many southern currents bringing warmer water from the Pacific and making the coast much milder than the country even thirty miles inland. The summers, on account of the heavy rainfall and cloudy weather, are much cooler and less pleasant on the coast than in the interior. The months of May, June, and July are sunny, fairly warm, and clear as a rule, and the development of plant life is extremely rapid. The snow has hardly disappeared before a mass of herbage has sprung up, and the patches which but a few days before presented the appearance of nothing but a white sheet are now teeming with an active vegetation, producing leaves, flowers, and fruit in rapid succession. The long arctic day seems to have little deleterious effect on plants, as they have their period of sleep, even as in the Tropics, which is indicated by the same drooping of the leaves and other signs observed in milder climates.

Many people have a wrong impression as to the duration of day and night here. While it is true that in the months of June and July and part of August the sun is visible for possibly twenty hours out of the twenty-four, and there is no darkness akin to night during the remaining four hours of the day, the spring and autumn are very similar to those seasons in a lower latitude, save in the rapidity with which the hours of sunlight increase or decrease. In the summer months it is only at night that the traveler or prospector is able to accomplish anything, as there is sunlight enough at midnight to read or work by, and the cool breezes that blow only at that hour bring relief from the stings of the myriad insects that have made the tropic-like day so unbearable.

The winter months are not so dark and gloomy as they are generally supposed to be. While the sun is visible for only a few minutes on December 21, the amount of actual sunlight is four and a half hours, and even after the entire dissipation of sunlight the light reflected by the snow and that borrowed from the aurora enables the traveler to

pursue his way, while the moonlight in this region seems to attain a higher brilliancy than in lower latitudes, it being possible to read by its aid, and photographs of even distant objects have been very successfully taken by an exposure of fifteen minutes.

The following table shows the mean temperature of the seasons as observed in 1894:

MEAN TEMPERATURE OF EACH SEASON, 1894.

Season.	Locality.		
	St. Michaels.	Nulato.	Ft. Yukon.
Spring	29	20	14
Summer	53	59	60
Autumn	26	36	17
Winter	9	-14	-24

The present winter (1897-98) has been one of phenomenal mildness. Observations of temperature at Circle City during the months of October, November, and December, 1897, show the following results:

October:	8 a. m.	8 p. m.
High	30	30
Low	-18	-6
Mean	8	
November:		
High	20	20
Low	-40	-39
Mean	-7	
December:		
High	26	6
Low	-34	-30
Mean	-6	

The mean annual temperature of the Yukon Valley, from the mouth of the river to the boundary line, may be roughly estimated at 23 degrees. The greatest degree of cold ever recorded in this district was 77 degrees below zero, but such cold as this is exceedingly rare, and has but little effect on the vegetation of the country, covered, as it is, with from three to five feet of snow.

Open water is found in many of the tributaries of the Yukon, even in the coldest weather, and many springs are never frozen. This phenomenon is particularly noticeable between Circle City and Fort Yukon. Oftentimes when traveling over a well-beaten trail in the coldest weather, when one's breath is frozen as rapidly as exhaled, a yellow smudge indicates that possible danger is lurking in the middle of the trail; but while you hesitate the smudge disappears and a volume of yellow water boils over the surface of the ice, and you break a new trail around the treacherous spot. This peculiar uprising of the water is undoubtedly due to the existence of hot sulphur springs in the bed of the river. The water at these points has a decidedly sulphurous taste.

The real opportunity for agricultural enterprise in any country can not be deduced from annual mean temperature alone, but it is in a measure dependent on the heat and duration of the summer. It is a common occurrence for the thermometer placed in the direct rays of the sun to rise gradually to 120 degrees and burst the spirit thermometers in use here, which intensity of heat can only be appreciated by one who has endured it. The only relief obtainable from the torridness of the summer months on the Upper Yukon, during which vegetation attains an almost tropical luxuriance, is found in the brief time when the sun sinks almost to the horizon in the north; the transient coolness of the midnight air then becomes a blessing to the weary voyager.

The annual rainfall for the Yukon Valley is estimated by careful observers at about twenty-five inches, while on the coast it is from sixty to seventy inches. The snow fall will probably average six feet in the Yukon district, although oftentimes it is as much as ten or twelve feet.

In the interior there is much less wind than on the coast, and the snow lies as it falls among the trees. Toward spring the gullies and ravines are well filled, the underbrush covered, and travel with dogs becomes easy and pleasant, for the snow, melted on its surface by the noonday sun, has been frozen to a crust, rendering snowshoes entirely unnecessary.

In the valley of the Lower Yukon the months of May and June and part of July bring sunny, delightful weather, but the remainder of the season is usually rainy—three or four days in the week, at least. In the latter part of the summer it is somewhat foggy, but as one ascends the river the climate improves, and the short summer is dry, hot, and pleasant, only varied by an occasional quick shower.

The climatic law which governs the distribution of trees and plants also seems to limit the wanderings of the aborigines. The Eskimos extend all along the coast and up the principal rivers as far as the tundra or flat lands reach. The Indians who populate the interior seldom pass without the boundary of the woods. Neither perform any agricultural labor whatever, unless one can so designate the picking of wild berries, which form their only vegetable food, except the roots of the wild parsnip and the leafstalks of a species of wild rhubarb. Until comparatively recent times little had been done toward agricultural progress, but the day is not distant when many varieties of vegetables will be grown around the miners' cabins in this icebound region.

The first requisite for habitation or even exploration in any country is timber. With it almost all parts of the Yukon territory are well supplied. The treeless coasts even of the Arctic Ocean can hardly be said to be an exception, as they are abundantly supplied with driftwood from the immense supplies brought down the mighty Mackenzie and the not less majestic Yukon and other rivers and distributed all along the coast line of Alaska by the waves and ocean currents.

The largest and most valuable tree found in the Yukon territory is the white spruce. This beautiful conifer is found over the whole country a short distance inland, but largest and most vigorous in the vicinity of running water. It attains a height of from 50 to 100 feet, and a diameter at the butt of one to two feet. The wood is white, close, and straight grained; it is easily worked, being light, yet very tough—much more so than its Oregon relative. For spars it has no superior, but is, as a rule, too slender for masts. It is very enduring, as is evidenced by the existence in the Yukon district of many houses built by the Russians sixty or seventy years ago, the timbers of which are to-day as sound as when they were built. It is interesting to note in this connection that the age of the spruce of the Yukon forests, as indicated by the annular fiber, is as great as that of the giant Douglas spruce of the lower coast, it being not uncommon to find here a tree with an eight-inch trunk that has attained an age of six or seven hundred years. This fact is attributable to climatic conditions, and eliminates from the problem of a future timber supply all calculations as to a new growth during the present cycle. The northern limit of this tree is about 67 degrees latitude. The unexplored waters of the Tanana bring down the finest logs of this species in the spring freshets. The number of logs discharged annually at the mouth of the Yukon is truly incalculable.

The tree of the next importance is the birch. This tree rarely grows over forty feet high and eighteen inches in diameter. It is the only hard wood found in the Yukon territory, and everything requiring a hard and tough wood (sleighs, snowshoes, etc.) is constructed of birch. A black birch is also found here, but it is too small to be of much use.

There are also several species of poplar. One of these, the balsam poplar, grows to a very large size, frequently attaining a height of sixty or seventy feet and a diameter of two or three feet. The wood of this tree, however, is too soft to be of much importance.

Willows and alder are more generally distributed than any other variety of trees. Along every creek in this territory one finds these species in great abundance, varying from ten to fifty feet in height, but rarely exceeding four or five inches in diameter. The wood of these trees is practically useless, being rotten at the heart, although the inner bark of the willow was much used by the natives in making twine for nets and seines before they could purchase twine from the commercial companies now trading on the river.

Other species of timber rising to the rank of trees in this district are the larch and some dwarf species of pine—not of such importance, however, as to warrant classification in this report, the woods being used for fuel when no other timber can be easily reached by the traveler.

The treeless coasts of the territory, as well as the lowlands of the Yukon, are covered in the springtime with a luxuriant growth of grass and flowers. Among the more valuable of the grasses is the well-

known Kentucky blue grass, which covers millions of acres in the Yukon flat lands, and grows luxuriantly even as far north as the Peel River. This is one of the most valuable pasture grasses known, as it endures the most rigorous winter as easily as the drought of a tropical summer, and is without doubt more nutritious than any other species of grass. It is on this grass that the settler who determines to combine agriculture with any other pursuit will depend for his supply of hay for winter feeding.

The wood-meadow grass, which in nutritive properties is akin to the Kentucky blue grass, is also very abundant, and would furnish cattle with an agreeable and fattening pasturage.

The blue-joint grass also reaches as far north as the Peel River latitude, and grows with a marvelous luxuriance. It reaches, in favorable situations, three or four feet in height, and may be used advantageously in the feeding of cattle.

Many other grasses grow abundantly and contribute largely to the sum total of herbage. Two species of southern lyme grass are found in the Yukon district that almost deceive the traveler with the aspect of grain fields, maturing a perceptible kernel which the small rodents lay up in store for winter use.

Grain has never been sown to any extent in this district. Barley has been tried at Fort Selkirk, near the mouth of the Pelly River, in small patches, and in the early days at Fort Yukon, and there was success at both places in maturing the grain, although at both the straw was very short. Grain sowing has never reached beyond the experimental stage, but these experiments have proved conclusively that grain could be grown in the Yukon Valley, and in abundance. It can be safely averred that sufficient grain can be grown in this district to supply the home demand for cattle feed, if enough energy is devoted to agriculture.

Turnips and radishes flourish exceedingly well all along the river from Fort Selkirk to St. Michaels. The white, round turnips, grown in this district from imported seed, are as fine as can be found anywhere, and are very large, some weighing as much as six or seven pounds. They are crisp and sweet, although the very large ones are hollow-hearted.

Potato growing is an established success. Nearly every trading post along the river has its own little potato patch, and although the tubers are small, they are of very fine quality. Care must be taken, however, that the seed potatoes are not frozen in the winter.

Salad growing is very successful. Cauliflowers of huge size may be grown if the seed is planted in shallow boxes in the houses and the plants not transplanted into the open ground until the summer is well advanced. These plants mature very rapidly, and well repay the little attention given them.

Cabbage will flourish under like conditions, and large heads of this esculent vegetable will be the result of a little timely care.

Tomatoes have not been grown, so far as can be learned, but if the seeds are sown in boxes in the house and the plants are not put into the ground until they are of good size, there is no reason why this vegetable should not flourish in this region, as the hot, dry summer is just what the tomato requires.

With such a variety of feed as may be grown in this district in abundance, there is absolutely no reason why cattle, with proper protection in winter, can not be successfully raised and kept in most parts of the Yukon Valley, fodder, as previously shown, being so abundant.

As might be supposed, there are no tree fruits in the Yukon Valley suitable for food, but small fruits of many varieties are found in great profusion. Among these may be noticed red and black currants, gooseberries, high and low bush cranberries, raspberries, salmon berries, thimble berries, killikinnick berries, blue berries, moss berries, juniper berries, and rose berries. The latter, when touched by frost, form a very pleasant addition to a somewhat scanty stock of comestibles, the flavor being an admixture of those of the crabapple and persimmon combined. All these berries, except the salmon berry, or Morosky of the Russians, are excellent antiscorbutics and possess, besides their edible qualities, other medicinal virtues. From many of them the most piquant and delicious preserves are prepared by the better educated natives and the white population, and they form an excellent adjunct to the eternal diet of fish, game, etc.

It is of course highly improbable that the Yukon territory will become an entirely self-supporting agricultural district, or that anyone will be able to obtain a subsistence by farming alone; still the settler called here to develop the resources of the country, be they fish, furs, or gold, may have fresh milk in his coffee and fresh vegetables on his table if he possess the energy and knowledge to make the most of his opportunities. It will not be necessary for him to rely on the products of the chase or the importation of food stuffs by the trading companies alone, if he will but take the care to provide suitable shelter for his cattle, gather for their winter fodder the perennial grasses which cover the flat lands and river bottoms, or uncover the abundant root crop which he has had energy and forethought enough to cultivate.

In summing up the agricultural resources of the Yukon Valley, it may be stated that its abundant capacity for producing root crops of good quality and large quantity may be considered as settled. Oats and barley, possibly wheat and rye, may be successfully raised under careful, systematic cultivation. In Iceland, where the temperature often falls as low as 35 or 40 degrees below zero, it is well known that fully 75 per cent of the population derive their maintenance from agriculture, and there is no reason why the Yukon territory, where the climatic conditions are not less favorable, should not supply a considerable amount of garden produce after proper preparation of the soil.

Notwithstanding the extremely rigorous winters of the Yukon district, it is essentially a healthful country, the only prevailing diseases being those of a pulmonary nature, and in nine cases out of ten the natives are the only ones afflicted. Rheumatism is somewhat common among the white population, but this is undoubtedly caused by extreme exposure. Scurvy, contrary to general opinion, is not prevalent, the only cases that have come under notice having been the result of culpable negligence of ordinary cleanliness, lack of proper food, or an inadequate amount of outdoor exercise. A peculiar form of fever of a typhomalarial type is found in the more thickly settled districts, but this is of a certainty due to the want of the most ordinary sanitary measures. Deep drains and a consistent amount of precaution will entirely dissipate the pestilential prevalence of this endemic disease.

It will thus be seen that the Yukon basin offers a much more diversified field for enterprise than is popularly supposed, and it is quite within the bounds of established fact to say that 100,000 people can find remunerative employment and a fairly comfortable existence in this region as soon as the means of transportation of food supplies shall justify so large a movement of population.

While society on the Yukon, like the geological formation, is as yet a sort of conglomerate, it is rapidly becoming stratified, and although the towns lack many of the comforts and conveniences that make life in the highest sense enjoyable, they are by no means social barrens, for there are among the inhabitants a large number of men of culture and refinement whose firesides are adorned by as charming representatives of American womanhood as can be found in localities much more favored in other respects.

BUSINESS OUTLOOK, OPPORTUNITIES FOR LABOR, ETC.

There is no man in the Yukon basin who has a more comprehensive understanding of the abnormal conditions existing there than Capt. John J. Healey, manager of the North American Transportation and Trading Company. Captain Healey, who for many years was a resident of Fort Benton, Mont., has had a varied experience on the frontier, and has proved his courage on many occasions, from encounters with the Blackfeet and Piegiens to engagements, as sheriff of Choteau County, with Missouri River and Yellowstone "rustlers." He entered this field in 1892, as one of the organizers of the great company of which he is now manager, having previously for six years been a partner in the trading post of Healey & Wilson, at Dyea. No better text for this chapter could be chosen than the following statement, which was taken stenographically from Captain Healey, at Dawson, on September 25, 1897:

In regard to the business outlook of this country, I would say that people who are organizing to come here to engage in commercial enterprises should understand that it takes two years' capital to do one year's

business. They can not come in here and secure returns in one year. Such persons should also understand that they can not build boats and get here the same year. We have tried it three years in succession and have failed each time. The difficulties to be overcome are too great.

There is another point to be taken into consideration in comparing prices here with those outside, and that is that we can not effect a dollar's worth of marine or fire insurance this side of St. Michaels. We have to carry our own marine, fire, and ice risks on the Yukon, and not many people are willing to put their capital into enterprises of this kind. We are carrying our own insurance because we can not help ourselves. Of course we insure on salt water as far as we can.

In my opinion there is a good field for day labor in the country. There is mineral of all kinds from coast to coast. Take Alaska from the southeastern coast, skirting around the Bering Sea and the Arctic Ocean, it is all a mineral range. You can not go anywhere but you will find minerals of all kinds. The trouble is in furnishing supplies under present conditions. The country is so vast that it will take years to supply it with food stations. The navigable streams, it is true, will be first utilized; but both Governments must organize a system of roads from these streams into the interior. They must construct roads into the Rockies on the north and east side of the Yukon and into the Alaskan Range on the south and west. If we had a force of people, whether military, police, or engineers, that would devote their time to building these trails and roads, I think the reindeer could be introduced here and utilized to good advantage. I believe the reindeer will be the coming pack horse of this country.

There is another thing to which I would like to call the attention of the Government. I have thought it over often, but have not yet formulated my suggestions. The most destitute native race on earth to-day are the Indians on the lower Yukon. For 300 miles from the mouth of that stream the principal subsistence of the native population consists of fish and oil. As you come higher up the river the condition of the Indians improves. They were in a wretched condition until we came into the country and gave them an opportunity to earn a little money by cutting wood for our steamers. Our Government ought to do something for those Indians. I am not an advocate of Indian agencies or anything of that kind. I do not believe in keeping the Indians in idleness, but the Government can utilize their services, and this can be done by making mail carriers of them and employing them to cut trails, and a native military organization might be established in the lower Yukon country. They are the best workers on earth, and the cost would be insignificant. All they want is a little flour, tea, and tobacco, and these can be laid down very cheaply by the transportation companies. Such a utilization of the services of these people would be of great benefit not only to them but to the Government. Under present conditions many of them die of starvation every winter. The Indians farther up the river are better off, because they work around the mines. They have abandoned the fur trade and are engaged in mining, packing, and hunting. They can get from 50 to 75 cents a pound for all the game they kill.

In regard to the outlook in Alaska, I will say that there is an abundance of low-grade diggings in that country at Forty Mile, Birch Creek, Minook, Seventy Mile, Coal Creek, and American Creek that will support thousands of men when they are ready to work for \$7 or \$8 a day. There are large tracts of country that will pay those wages. In some

of the claims they can work but three months in the year, while in others they can work all the year round. In the mines where they ground-sluice the season is sometimes quite short, but in the drift diggings, which are above water line, they can work the year round.

There is no doubt that there is room here, in work and prospecting, for all the idle miners in the United States. A great many of them will be disgusted when they come here and will not remain and prospect on account of the radical change from the conditions to which they have been accustomed. They have to be able-bodied and act as their own pack horses, and of the men who have been used to riding a cayuse through the mountains and taking a pack animal with them not one in ten will stay in this country, wading through the muck, brush, and moss and fighting the mosquitoes. In order to succeed here a man must have an iron nerve and constitution, and those who are not so constituted should remain away. It is going to require slow, hard prospecting to develop our resources. You can not see anything; everything is covered by moss, vegetation, and brush. There are no prairies, but it is all an undergrowth of brush and timber. The country has not been prospected at all as it should be. Prospectors follow up the rivers in boats as long as they can, and if they leave their boats at all it is only for a day, with a little lunch on their backs, so that they can get back to their supplies. That is the only kind of prospecting that has been done. There is not a man in the country who knows what is back from the river a hundred miles; there is not a man living that has been back a hundred miles from this water course to engage in systematic prospecting.

There is coal down about Cudahy and ten miles from there. There is a five-foot vein of fine coking coal within eighteen miles of here, about eight or ten miles from the river. There is coal on the American side, about fifty miles above Circle City. There is also coal below Circle City, near the Tanana.

Copper, asbestos, antimony, and galena abound, and there is a good deal of low-grade, base ore in the country. I have not seen any free-milling gold ore yet. In time, when labor and provisions become cheaper and the transportation companies can lay down supplies at reasonable prices, these low-grade ores are going to give employment to a great many miners. My opinion is that Alaska and the Northwest Territory within fifty years will produce more minerals than all the other mineral regions of the country put together. I may be visionary, but this is my opinion, based on personal observation. The Tanana Valley will astonish the world even more than the Klondike has. That is the great copper district. The mines that can give employment to large numbers of men for long periods of time are the ones from which the country reaps the most substantial benefits.

About the labor question. I have had a great many men make application to me for assistance, saying that they were broke and wanted to secure an outfit for the winter. This was early in the season, a month or six weeks ago. I said to them, "Why don't you go to work?" They replied, "Well, we don't want to work for wages; we want to work on a lay." The wages in the mines are \$15 a day, and the wages of laborers are \$10 a day, and I told them that they could go to work for wages and in thirty days have enough to buy an outfit for a year; but still they would not go to work. I thought I would stop the thing. A few friends of mine have some claims, and they wanted some men at \$10 a day to work them; so I put up a notice, "Eight or ten men wanted; wages, \$10 a day." You know the claim owners have decided on pay-

ing a dollar an hour from the 1st of October, furnishing the men cabins to sleep in, the miners furnishing their own food. The first application I have had to work for \$10 a day, in response to that notice, came in to-day.

I advise the bringing in of silver coin. It is the medium which people use in traveling, in paying the Indians for their little services, etc. There is not a man traveling who does not want an ounce or two of dust changed into silver. Each Government ought to have an assayer, so that a man could take his gold dust to him and have it run into bullion; then that man could come to us with his gold, which would have the stamp of one of the Governments on it, and we could give him our check for it.

Captain Healey's statement is commended to the careful consideration of all who contemplate coming to this country either to engage in commercial enterprises or to participate in the uncertain pursuit of hidden treasure.

There are very many intelligent and practical men here who differ radically with Captain Healey as to the difficulties and unprofitableness of commercial enterprises on the Yukon. The representatives of both companies claim that neither made any money during the past season on account of their ill success in getting freight to Dawson. A few figures on this point may be suggestive. As stated by the agents of the companies, and as verified by reference to the manifests, 2,930 tons of freight were landed in Dawson during the season. In their system of accounts a charge of \$75 per ton, approximately, is made against transportation from San Francisco and Seattle to St. Michaels, and a charge of \$60 per ton from St. Michaels to Dawson, or a total of \$135 per ton, and a grand total of \$395,550 as the cost of transportation for the 2,930 tons carried. It will be assumed, for the purpose of this illustration, that the \$395,550 covered all expenses of transportation from San Francisco and Seattle to Dawson. It is susceptible of mathematical demonstration that the average selling price of all merchandise is not less than 35 cents per pound (it is greater than that, but the figure given will suffice for this illustration), or \$700 per ton. If it be suggested that much of this tonnage consisted of clothing, dry goods, drugs, etc., a large proportion of which becomes dead stock, and much of which can not be treated on the basis of weight, an adequate reply is that such portion of this class of merchandise as is sold (commanding as it does from 200 to 1,000 per cent profit) brings prices per pound to a figure more properly stated in dollars than cents. At the price named, \$700 per ton, the gross receipts for the 2,930 tons amount to \$2,051,000. We will now assume the first cost of the 2,930 tons of merchandise was 10 cents per pound, or \$200 per ton, which gives us \$586,000. Adding this sum to the expenses of transportation, and allowing \$200,000 for the cost of administration of the Dawson establishments, we have \$1,181,550, and subtracting this from the gross receipts we find that the net receipts, after paying all operating expenses, amount to \$869,450. As the business is conducted on a

strictly cash basis, we do not have to consider bad debts; but if it be suggested that we have overlooked breakage, wastage, and incidental expenses, we may be able to dispose of these in this manner: We will assume that fifty tons of liquors were landed in Dawson (it was much more than that), and allowing ten pounds to the gallon, including packing, we find that this amounts to 10,000 gallons, which at \$17 per gallon gives a total of \$170,000. Deducting from this \$35,000, a sum we have already used in our computation of \$700 per ton for merchandise, it leaves \$135,000 to cover breakage, wastage, and incidental expenses. In this calculation we have taken no account of the cost of plant, which is placed by the companies at \$400,000, assuming that this will be taken care of out of the profits on the 2,000 or more tons of freight landed at Forty Mile, Circle City, Fort Yukon, and Minook, all of which is being sold at prices approximating those charged in Dawson. No consideration has been given to St. Michaels and stations on the river other than those named, as they are all assumed to be self-supporting. While this showing of results for Dawson, judged by Klondike standards, may not be considered magnificent, it is certainly pretty good for a bad year. That the miners of the Klondike are able to stand this drain, supplemented by the still more extortionate charges of conscienceless speculators, and yet send out of the country enough gold to astonish the world, indicates that the richness of their mines has not been greatly exaggerated. These figures, which can be applied as well to the Forty Mile and Birch Creek mines, also show why the miners of those two districts, although they have for years been taking out large quantities of gold dust, have never been able to send enough of it to civilization to impress the world with the richness of their mines.

An experienced river man here has made the following statement: "I could buy 300 tons of bacon in Seattle at 8 cents per pound, or a total cost of \$48,000. I could construct a knock-down steamboat of 300 tons for \$30,000, and on the basis of \$18 per ton could land my steamer and bacon at St. Michaels for \$10,000. It would cost probably \$10,000 more to put the steamer together, making her total cost \$40,000. I might not be able to get up the river the same year, but I could surely get up the following summer. Allowing for an expenditure of \$350 a day for twenty days from St. Michaels to Dawson, the cost of transportation on the river would amount to \$7,000. My total expenses, therefore, would be \$105,000. If I could sell my bacon for 40 cents per pound, the price at present charged by the companies, my gross receipts would be \$240,000. I could then set fire to my steamer and turn her loose in the river and still make over 100 per cent on my original investment, with \$30,000 to spare for contingencies."

While the above figures would indicate that there are great opportunities to make large profits in commercial enterprises on the river, it should be borne in mind, as Captain Healey states, that the risks and

difficulties are very great, and that it is necessary to wait two years for returns, while it is quite likely that so many will enter the field that competition will reduce the profits to a narrow margin. No organization with less than \$100,000 of capital could hope under present conditions to successfully compete with the companies already established.

The most successful ventures during the past year, outside of the operations of the companies and the mines, have been in the importation of beef cattle and sheep. Altogether about 350 head of cattle and 1,550 head of sheep were brought over the trails and down the river to Dawson, and all who engaged in the enterprise made money, as they sold their beef and mutton at prices which averaged \$1 per pound. It should be stated, however, that the season was extremely favorable, both as to its length and the condition of the streams, which had to be forded. If the water had been high in the streams a large number of cattle would undoubtedly have been lost in swimming them. One drover reports that in crossing the Chilkat River he was forced to sit helplessly on his horse and see his herd of eighty-five cattle disappear in the quicksand until in many cases only their heads were visible. Fortunately, the quicksand was shallow, and the cattle were rescued by means of lariats, but in an exhausted condition, which rendered it necessary to allow them several days' rest. This drover finally reached Dawson with sixty head, having lost twenty and sold five on the way. In addition to the risks involved, the expenses attending such undertakings were very heavy. A large number of horses were necessary, and although the men employed on the coast were engaged at reasonable wages for the trip, many of them deserted at various points, compelling the employment of others at \$10 a day, and even larger wages in some cases. Some of the drovers were four or five months on the way, and all this time of course were under a heavy expense in the matter of wages and subsistence. It is noteworthy, as showing the uncertainty in the minds of the drovers as to the prices they would be able to secure at Dawson, that two of them who had their herds at Fort Selkirk about the middle of September, awaiting cold weather before slaughtering, were willing and anxious to sell at 50 cents per pound by the quarter to people passing down the river, although, as subsequently learned, beef was selling for \$1 and \$1.25 per pound at Dawson, only 160 miles below Fort Selkirk.

Many small traders made money during the summer by bringing in over the trails and down the river small stocks of goods which brought large prices, this being particularly true of diamonds and watches, which sold at prices that yielded a profit of from 100 to 150 per cent; wolf and bear robes, which cost from \$40 to \$50 in Seattle and sold here for from \$150 to \$250; cow-boy hats, costing \$4 in the States and selling in certain circles for \$17, and many other articles in like proportion. Others did not do so well, some even being forced to sell at prices

which yielded no profit whatever. A large number of men have gone out over the trail this winter (1897-98) for the purpose of bringing in goods of various kinds, but as it is impossible for anyone to foresee what lines will be scarce, this species of gambling is about as uncertain as speculating on the stock exchange.

At first thought it would seem that there ought to be an immense profit in freighting for \$2 per pound, the price offered in October for the transportation of supplies from Fort Yukon to Dawson. The recital of one man's experience in such work during the past fall, with the view of showing the risks involved in such undertakings, may be of interest to the general reader and instructive to those who contemplate embarking in similar enterprises. About the middle of October the leading packer of Dawson, who had been engaged during the summer in packing to the mines, found that it would be necessary, owing to the scarcity of supplies and the consequent falling off of business, to withdraw some of his horses from the trail, and as the lack of feed made it impracticable to employ them in other work, he decided to take them to Fort Yukon in scows and engage in freighting from that point as soon as the ice should form. On the announcement of his intention he was overwhelmed by tenders of \$2 per pound, in advance, for all the freight he could bring back, and as he could transport 1,200 pounds to the animal it was quite clear that under favorable conditions his gross earnings would amount to the comfortable sum of \$21,600; but with a wisdom born of four years' experience in the business, he declined to enter into any agreement, preferring not to run the risk of facing the holders of broken contracts. On October 22 he left Dawson with nine head of horses, loaded in scows, and in charge of five men, one of whom was engaged at \$350 per month and the others at \$200 per month apiece and subsistence. His horses were worth at least \$225 apiece, as he could have sold them for that price for dog meat, and he had purchased three scows at an aggregate cost of \$300. He had employed men at Forty Mile during the summer to cut and store six tons of hay at a cost of \$800. His initial outlay, therefore, was \$3,125, exclusive of supplies for his men. Forty Mile was reached without accident, although the ice was running heavy and strong, and the hay was taken on board and distributed at various points below for the purpose of feeding on the return trip. Twenty-five miles below Forty Mile the scow containing the horses struck a rock, and one of the best animals was thrown overboard by the force of the collision and drowned. The damaged scow was repaired and no further serious trouble occurred until a point about sixty-five miles above Circle City was reached, where it was discovered that the river had closed. It being impossible to proceed with the horses until the ice became stronger, and there being but little feed for them, the packer came on to Circle City afoot to procure enough feed to last until the trail should open. Three hundred pounds of flour was purchased at \$35 a hundred and a dog team employed at

an expense of \$250 to carry it up to the camp. At the end of ten days it was thought that the ice was strong enough for the horses to travel on it in safety, and the attempt was made to bring them to Circle City.

The ice was so thin that all of the horses frequently broke through into the chilling water of the river, and it was with great difficulty that any of them were rescued, three being drowned on the way down. After two weeks of great suffering and privation for man and beast, the packer reached Circle City with five of the nine horses with which he started from Dawson. They were allowed a week's rest, meantime being fed on damaged flour at a cost of \$5 a day per head, and then the packer started with them for Medicine Lake, some sixty miles from Circle City, where he had six tons of hay which he had had cut during the summer of 1896, at a cost of \$360. On the way out one of the horses fell on the ice, breaking his leg, and had to be shot, while another injured himself so badly by a fall that he died. The packer proceeded to Medicine Lake with his three remaining horses, secured some of the hay, and returned to Circle City, where he is now engaged in hauling wood at \$12 a cord. If the horses were in good condition, it would be possible to make \$36 a day to the animal at this price; but as they are very weak and shaky on their legs, their owner works them barely enough to pay running expenses, which are as follows: Wages of three men, \$750 per month; subsistence of men, \$150; subsistence of horses, \$450; total, \$1,350. At the end of the first month the packer dispensed with the services of two men. His expenses for the first month were as follows: Loss of six horses, \$1,350; cost of scows, \$300; wages, \$1,150; subsistence of men and horses, \$700; total, \$3,500. All he has to show for this outlay is three very puny horses that will probably never reach Fort Yukon alive, and nine or ten tons of badly scattered hay that cost him about \$1,000, and that may become available some day, if another man with sufficient courage to bring horses down the Yukon should ever put in an appearance.

While those engaged in freighting with dog teams are more successful than the unfortunate packer whose experience is related above, their returns are far from adequate when the outlay for dogs and the hardships of a life on the trail are taken into consideration. The most successful freighter on the Birch Creek trail last winter, working with a team of eight dogs that cost him \$1,600, made twenty-seven round trips during the freighting season of as many weeks. His gross earnings were \$3,200, of which \$800 is still outstanding, and his expenses were \$1,200, leaving him for seven months of most exacting labor \$1,200 cash in hand—a comfortable sum, it is true, measured by standards which prevail in the United States, but which here was soon dissipated in the purchase of an outfit for the next season's subsistence, and in the payment of other necessary expenses.

The best team engaged this winter in freighting between Circle City and Fort Yukon, a distance of eighty-five miles, consists of eight dogs,

for which the owner has been offered and refused \$4,000 cash. A round trip can be made in ten days with a load weighing 1,400 pounds, exclusive of camp outfit and dog feed. At the prevailing rate, 25 cents per pound, the gross earnings amount to \$350. The expenses are as follows: Wages of trail-breaker, \$100; cost of dog feed, \$80; subsistence of men and incidental expenses, \$50; total, \$230. Deducting this sum from the gross earnings, the freighter has for his ten days' hard work \$120, a figure that is not attractive here, especially when one considers the amount he has invested in dogs, the hard work he has to perform, and the fact that he finds it necessary to spend two or three days at each end of the route to rest his dogs and himself.

It should be borne in mind that the two instances just given are exceptional, and that the average freighter does not do anywhere near as well as those mentioned. Furthermore, the freighters at Circle City have just received the discouraging news (to them) that the scarcity of provisions at Dawson is not as serious as people have been led to suppose, and that therefore they can not hope to obtain more than \$1 per pound for freighting to that place—a rate which yields scarcely any profit, on account of the long haul, necessitating the carrying of so much dog feed that the freight space is greatly reduced.

Thus it will be seen that on account of the difficulties of transportation and the uncertainties of the market, the field for legitimate commercial enterprise on the Yukon is circumscribed and precarious. There is one line of commerce, however, that offers vast opportunities to American enterprise, as the power of the community to consume the commodity involved is so great that it is not likely there will ever be an oversupply. This is the illicit traffic in alcoholic liquors—the curse of Alaska and the source of the wealth of many of its most prosperous citizens, and some who live beyond its limits. The ring, with headquarters at Portland, dominates the entire region from Juneau to the Arctic Ocean, and from the Aleutian Islands to the Klondike, and carries on its operations at every point in the vast territory described where a few white men congregate for the winter, or wherever Indians are gathered in sufficient numbers to justify the pursuit of its nefarious enterprise. Its agents openly boast that no Government official can withstand their blandishments, and in support of the boast do not hesitate to name ex-officials of the customs and revenue service who, after a short term of office here, have returned to private life with large sums of money which by close attention to business and strict economy they were enabled to save from aggregate salaries amounting to probably one-fourth of the sums realized. Primarily, the General Government itself is responsible for this deplorable state of affairs. In the organic act relating to the District of Alaska the importation, manufacture, and sale of alcoholic liquors is prohibited except for “medicinal, mechanical, and scientific purposes.” Conscientious customs officials, one of whose

duties it is to enforce this provision, on arriving here are confronted by the staggering fact that revenue officials are already on the ground issuing licenses to saloon keepers on every hand. What an alluring invitation to corruption, and what an illimitable field it presents for the exploitation of the commercial genius of an enterprising American citizen so constituted that he can detach his conscience and leave it at home! In other ways the provision above referred to possesses wonderful elasticity; for instance, there is extant a permit, issued at Sitka, for the sale during a period of twelve months from its date of 2,000 gallons of whisky for "medicinal, mechanical, and scientific purposes" in a community of such meager population that the quantity of whisky mentioned represents a supply of twelve gallons per capita, and where there is so little sickness from natural causes that a physician who placed his dependence on that class of practice would starve to death, and where the mechanic arts are as yet unborn.

Happily for the honor of the country the present administration of the customs service is clean and vigorous, and the officials here are doing all it is possible to do, under the anomalous conditions, to prevent the sale of liquors, but with their poor equipment and the immense areas they are expected to cover they find it impossible to control the traffic.

It would be far better, even from the ethical point of view, to adopt a properly regulated, high-license system than to retain the present absolutely inefficient provision. Of course, the object of the law, primarily, was to prevent the sale of intoxicating liquors to the Indians; but from the first it has utterly failed to accomplish its purpose. Now that white men are coming into the country to develop its resources, they ought to be given white men's laws and be relieved from the humiliation of being treated like Indians. Under the operation of the present law, which makes liquors liable to confiscation, the dealers import the vilest stuff known to the trade, consisting principally of unrectified high wines and even less inviting raw material. The only whisky sold here that can in any sense of the word be called "good" (and then only by comparison with high wines, etc.), is that which is bonded to Northwest Territory and then smuggled from Fort Yukon and Dawson into Circle City. The practical effect of the law is to force upon the community the worst liquors that can be manufactured, while as to quantity and in other respects the traffic is but slightly restricted.

It might seem that the moral and physical effects of such a condition could easily be imagined by anyone reading the simple facts, but no one who has not witnessed the workings of the law on the ground can have any conception of the blighting influence of the infamous traffic. In this connection a word of warning should be spoken to parents who are afflicted with wayward sons and contemplate sending them to the Yukon in the hope that the pure mountain air and the simple outdoor life may wean them from evil associations at home. From the number

of such young men that have been sent here for a reformatory course it would seem that there must be an impression that this country offers a safe asylum to the victims of perverted appetites; but such is not the case. Young men who need reformation are the very ones who should not come here. Their safe course is to remain where civilization puts its shields around them.

Putting aside all consideration as to its moral and physical effects, it must be admitted that the traffic offers great attractions to the man who wants money so badly as to render it immaterial to him how he makes it. High wines and "hootch" (*a*) command \$30 and \$20 per gallon, respectively, in Circle City at the present writing, while whisky brings from \$40 to \$100 per gallon when obtainable. The saloon keepers charge 50 cents a drink, using a glass that enables them to extract seventy drinks from a gallon. Through the dilution of the raw material in the proportion of two to one they receive about \$100 per gallon for the stuff when sold over the bar. Latterly their industry has been somewhat injured in the matter of profits by unscrupulous wholesale dealers in high wines who have adopted the rule of doing the diluting themselves, thus practically getting from \$40 to \$50 per gallon for high wines formerly sold for \$30. The middlemen complain bitterly of this dishonest usurpation of their prerogative, but are obliged to submit or resort to the only alternative—hootch.

There is absolutely no field in the Yukon basin at the present time for professional men. It would require a population of 20,000 to assimilate the lawyers, physicians, dentists, electrical engineers, etc., now on the ground. A large proportion of this class already here are, apparently, men of fine qualifications and thorough masters of their professions, and in the nature of things will have a great advantage, in the matter of acquaintance with men and conditions, over those coming into the country hereafter. Most of them are spending the winter in idleness, consuming their substance and cursing the country. Nearly all who have the means to return home next year have announced their intention of doing so, but many will be forced to remain here and join the army of the unemployed. They can not work in the mines, and would make poor prospectors; for, as Captain Healey truly states, it requires a man of iron nerve and constitution to stand the hardships of the hills. Typewriter operators and commercial stenographers can find no employment here until the two Governments give to the country a mail service that will enable merchants and other business men to communicate with the outside world.

a Hootch is the Indian name of a vile substitute for whisky that is sold by the saloon keepers throughout the Yukon basin when their supply of the but little less vile whisky is exhausted. It is distilled from an admixture of sour dough, rice, raw sugar, and unsalable dried apples. This product, which is sold by the manufacturer for \$20 per gallon, is exceedingly rich in fusel oil and other diabolical constituents. By an ingenious process, known only to themselves, the primary step in which is the addition of two gallons of Yukon water, the saloon keepers are enabled to convert a gallon of hootch into three gallons of so-called whisky.

The statements made in the sections on the Klondike and Dawson relative to the opportunities for wage workers are equally applicable to northern Alaska. Many mine owners here are making their calculations on a basis of \$6 per day for labor, and confidently express the opinion that the influx of people next summer will enable them to work their mines at that rate of wages. Whether the reduction will occur next summer is questionable, but it can not be long deferred. When wages drop to \$6 per day this country will offer no inducements to a workingman with a family.

There are two classes of young men that need not be discouraged from coming here. The young man of good health and ample means, who can afford to spend a year or two in looking over the ground and watching for opportunities to invest in mining property, furnishing "grub stakes," etc., will find an attractive field here, and the young man of robust constitution and a capacity to carry 150 pounds on his back all day over a steep mountain trail will stand a good chance of striking it rich in the hills.

Finally, no man should come into the country without at least 1,500 pounds of provisions and sufficient means to take him back to civilization at the end of the year in case of failure.

Since the above was written, a newspaper containing a letter from William Ogilvie, esq., land surveyor of the Dominion Government, has come to hand. On account of his long residence here and his thorough knowledge of conditions on the Yukon, no man is better qualified than Mr. Ogilvie to give advice on the subject treated in this section, and the liberty is taken of quoting a portion of his letter:

To those contemplating coming into the country to advance their fortunes I would say emphatically, consider the reports you hear concerning the rich returns of Bonanza and Eldorado as a matter of history, from which you can derive no more benefit than you would from reading the record of the richness of the finds of Australia and California in the early days. These two creeks, as I have already said, are completely occupied, and I can at present recall only one case where the whole of a claim is the undivided property of one individual. Many of them are split up into four interests, some six, some eight; but even those small interests will enrich the parties holding them.

To-day, had you means to purchase an interest in any of them, you have means enough to stay at home with vastly more comfort and benefit to yourself. To all who contemplate coming in, I would say, very few possess the requisite fortitude and patience for the task before them, and I have no more doubt of the sun rising and setting to-morrow than I have that a very large percentage of those now anxiously awaiting some means of getting into the country, leaving it possibly in a few hours after they have arrived, will be disgusted with themselves for having listened to what they will consider idle tales when once they are landed there.

To a man determined to better his position in life, untrammelled by family cares, with means enough at his command to lay in provisions and supplies for a year at least, of good physique and health, abundance of fortitude and patience, and determined to spend, may be, ten years in one country and see it out, I would say: You possibly can

not do better, though you would probably find at the expiration of that time that your plodding brother or neighbor remaining at home has achieved at least as much worldly success, with much more enjoyment of life and much less physical exertion. There are exceptions to this, no doubt many of them, but it is the rule. If you are determined to try your luck in Alaska, as the whole gold-bearing country is termed generally, come, hopeful and self-reliant, but at the same time have your mind prepared for disappointment, it may be, bitter and long-continued.

Bonanzas and Eldorados are not often struck. Such spots are few and far between; but there is other ground, and much of it, too, that will yield as good a return for labor expended as most of the gold mines in the world, I have no doubt. It is, then, Come prepared and determined to find it, and I hope you will succeed in doing so. But do not be disappointed if years roll by without your achieving more than an ordinary living. This is the experience of many men now in the country, who have been in it for years, while some, I know, who were only in it months, went out this season rich.

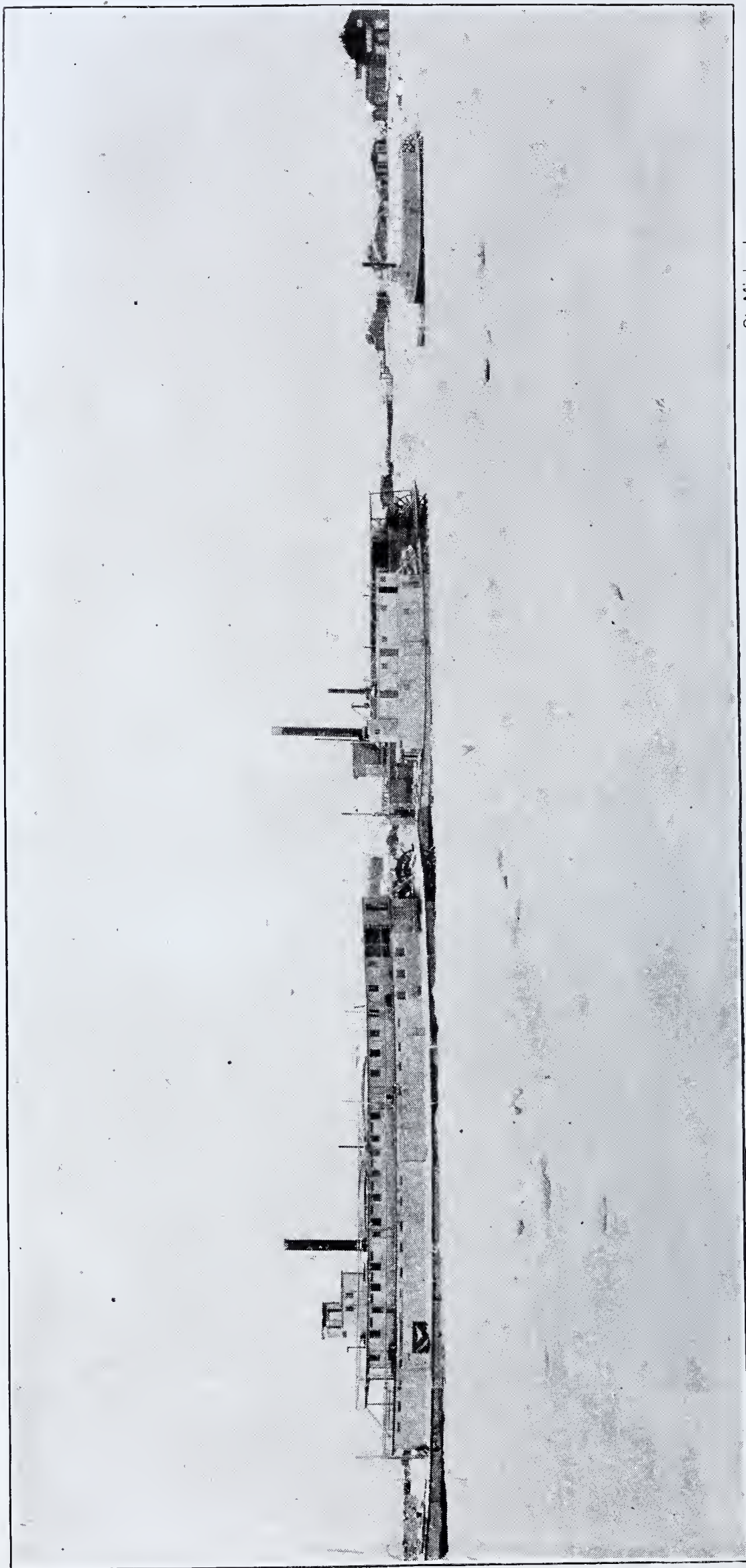
TRANSPORTATION: NAVIGATION OF THE YUKON, POSSIBLE RAILWAY ROUTES, ETC.

The Yukon is one of the great rivers of the world. In length it is exceeded in North America by the Mississippi, the Missouri, and the Mackenzie only, and in the volume of water it carries to the sea by the Mississippi alone, while in the sustained grandeur of its ever-changing panorama of mountain and vale it surpasses all its rivals.

It is formed by the confluence of the Lewes and Pelly rivers, and is 2,155 miles long. Lewes River, so called, which has its source in Crater Lake, in American territory, just below the summit of Chilkoot Pass, nineteen miles from Dyea and 381 miles from its junction with the Pelly, should be known as the Upper Yukon, as it carries a much larger volume of water than the Pelly, the Teslin (Hootalinqua), or the Tahkeena, each of which is claimed by many to be the true head waters of the Yukon. With the Lewes added, the great waterway has an extreme length of nearly 2,600 miles, placing it among the four longest rivers in North America.

In order to furnish accurate information to travelers, and especially to river men and others who contemplate engaging in navigation on the Yukon, great pains have been taken to secure facts from men who have been running on the river for years, and the following matter relating to the subject can be accepted as presenting the most trustworthy data obtainable here at the present time.

The first steamboats to navigate the Yukon above the missions and trading posts on the lower river were the *St. Michael*, the *Yukon*, and the *New Racket*, boats of about twenty tons each, all of which ascended as far as Forty Mile during the season of 1887. The *Arctic*, a boat of 225 tons, belonging to the Alaska Commercial Company, loaded for Forty Mile in 1889, but was disabled in Norton Sound and did not reach that post until the following summer. With the increase of the



Weare.

Bella.
Victoria.

St. Michael.

STEAMERS IN WINTER QUARTERS, CIRCLE CITY, ALASKA.

output of the mines of the Forty Mile district and the development of the Birch Creek mines the Alaska Commercial Company was obliged to make additions to its fleet in order to keep pace with the growing business. In 1892 the North American Transportation and Trading Company entered the field with the steamer *Weare*, and established a trading post at Forty Mile known as Fort Cudahy, which has been followed by posts at Dawson, Circle City, Fort Yukon, and Rampart City (Minook). The Alaska Commercial Company has posts at Dawson, Forty Mile, Circle City, Fort Yukon, Fort Hamlin, Rampart City, Tanana, Nulato, Anvik, and Andreafski. Both companies have large stores and warehouses on St. Michaels Island, which is located in Norton Sound near the mainland, sixty miles north of the mouth of the Yukon, and is the distributing point for the Yukon trade. St. Michaels is 3,200 miles from San Francisco, the passage by ocean steamers being made in seventeen days, while from Seattle the voyage is made in three days less. The distance from St. Michaels to principal points on the river are as follows: Fort Adams, 1,250 miles; the Tanana, 1,265; Minook, 1,315; Fort Hamlin, 1,385; Fort Yukon, 1,665; Circle City, 1,750; Forty Mile, 1,997; Dawson, 2,050; Sixty Mile, 2,105; Fort Selkirk, 2,210.

Four of the Yukon boats—*Weare*, *Bella*, *Victoria*, and *St. Michael*—in winter quarters at Circle City, are shown in the accompanying illustration. The *Victoria* and *St. Michael* also appear in the first illustration, the *Victoria* to the right.

The North American Transportation and Trading Company has three boats plying on the Yukon.

The *Weare*, which was launched in 1892, is 175 feet long, 28 feet beam, and 5½ feet depth of hull, and has a carrying capacity of 335 tons when drawing 4½ feet, and accommodations for sixty passengers. She has two fire-box boilers, containing 70 tubes each, and two high-pressure engines, with 13-inch cylinders and 72-inch stroke, which can develop 1,900 horsepower, producing a speed of ten miles an hour in slack water.

The *Healy*, which was launched in 1896, is a little larger than the *Weare*, being 175 feet long, 32½ feet beam, and 5 feet depth of hull, and she has the same kind of machinery as the *Weare*. Her carrying capacity is 400 tons when drawing 4½ feet, and she has accommodations for 125 passengers.

The *Hamilton*, the new boat, which was launched last August, is 190 feet long, 36 feet beam, and 6 feet depth of hull, her carrying capacity being about 500 tons, with 4½ feet draft. She has three 36-tube boilers 42 inches in diameter and 24 feet long, which supply two D-valve, high-pressure engines, with 26-inch cylinders and 7-foot stroke, of 2,500 horsepower. She accommodates 200 passengers, and is the fastest boat on the river, being capable of a speed of seventeen miles in slack water, and making ten miles an hour upstream against an average current. She is provided with electric lights and a search light, and is in every respect a first-class modern river boat.

From an interview with Vice-President P. B. Weare, which appeared in the Chicago Times-Herald of July 28, 1897, the following statement is taken:

We have ordered all the material and machinery for an 800-ton light-draft steamboat, up to date in every particular, including electric lights, to be built this fall at St. Michaels Island. She will be named *John Cudahy* and will be fitted for passengers as well as freight. * * * We are also building a very light-draft steamer, which will run on eighteen inches of water. She will be called the *Klondike*, and will be employed to tow barges during the low-water stage in the Yukon. We are constructing five 200-ton barges, which, when loaded, will draw not to exceed twenty-four inches. We have bought and will take to St. Michaels Island a very powerful tug, which will be employed to tow barges with supplies from Fort Get There (St. Michaels Island) to the town of Weare, 500 [*sic*] miles up the Yukon. She will make two trips this fall. The mouth of the Yukon is choked up by drift from Bering Sea until early in July, fully one month after navigation of the inner river has opened. We can do at least four weeks' work inside before the mouth of the river is navigable. We shall winter all our boats about 400 miles from the mouth of the Yukon.

The Alaska Commercial Company had four steamers running on the river the past season.

The *Bella* is 140 feet long, 33 feet beam, and 7 feet depth of hull. She is provided with hermaphrodite, double-expansion engines without condensers, having a 72-inch stroke and a 14-inch bore in the high-pressure cylinder and a 24-inch bore in the low-pressure cylinder. She has 2,200 horsepower and a speed of twelve miles an hour in slack water. Her carrying capacity is 125 tons when drawing 4 feet of water and a little over 200 tons when loaded to 6 feet draft. She has no accommodations for passengers, having been built specially for towing barges, frequently taking two barges as far as the Lower Ramparts.

The *Alice* is 165 feet long, 33 feet beam, and 8 feet depth of hull. Her boilers and engines are of the same type and power as those of the *Bella*, and she carries 300 tons when loaded to 4½ feet. She has accommodations for seventy passengers, and her speed is about nine miles an hour in slack water.

The *Margaret* is a 400-ton barge converted into a steamboat, having the machinery of the old steamer *Arctic*, which was wrecked last May when the ice broke up, at a point three miles below Forty Mile, where she had been forced to lay up for the winter. The *Margaret* has single-expansion, high-pressure, slide-valve engines, with 14-inch cylinders and 5 foot stroke, of 900 horsepower, and can make nine miles an hour in slack water. Loaded with 300 tons she draws 4½ feet. She has no accommodations for passengers.

The *Victoria* is 85 feet long, 19 feet beam, and 5 feet depth of hull. She is equipped with high-pressure slide-valve engines of 250 horsepower, with 10-inch cylinders and 36-inch stroke. Her carrying capacity is sixty-five tons, and her speed about seven miles an hour in slack

water. She has no accommodations for passengers, having been built specially for upriver freight traffic.

Besides these four boats the company has three 400-ton barges, 140 feet long, 32 feet beam, and 7 feet depth of hull, drawing when loaded $4\frac{1}{2}$ feet.

The company is building at St. Michaels, to handle the growing business, a towboat similar to the *Bella* in size and power, and four barges, each 140 feet long, 33 feet beam, and 7 feet depth of hull, with a carrying capacity of 400 tons. They are also building at San Francisco a steamboat 220 feet long, 40 feet beam, and 5 feet depth of hull. She will be provided with three Otis steel boilers, 42 inches in diameter and 26 feet long, each having five 9-inch return flues and 2,200 horsepower high-pressure engines, with 20-inch cylinders and 72-inch stroke. Her carrying capacity will be 700 tons when loaded to $4\frac{1}{2}$ feet, and she will have seventy-six staterooms, accommodating 152 passengers.

Each of these boats carries a crew composed of the captain, the purser, two pilots, two mates, two engineers, two firemen, one carpenter, two cooks, one watchman, two deck hands, and from twelve to fifty roustabouts, according to the size of the boat and the cargo. The salaries and wages are as follows: Captain, \$2,500 per annum; purser, \$100 per month; pilots and mates, \$100 per month each; engineers, \$120 per month each; firemen, \$2 per day each; carpenter, \$100 per month; cooks, \$75 and \$50 per month; watchman, \$75 per month; deck hands, \$2 per day each, and roustabouts, \$1.50 to \$2 per day each. The pilots, firemen, and roustabouts are usually Indians.

The boats consume from one to two cords of wood per running hour, according to boiler capacity. Wood is purchased at the wood yards for \$4 a cord, or cut by the crew at various points as it may be required.

The passenger rates between St. Michaels and Fort Selkirk are at present as follows: From St. Michaels to Kútlik, \$5; Akuluruk, \$6; Andreafski, \$11; Russian Mission, \$17; Koserefski, \$21; Anvik, \$23; Nulato, \$28; Kokerines, \$35; Fort Adams, \$40; Tanana, \$41; Minook, \$45; Fort Hamlin, \$50; Fort Yukon, \$64; Circle City, \$65; Seventy Mile and Forty Mile, \$75; Dawson and Sixty Mile, \$90; Stewart River, \$95; White River, \$96; Fort Selkirk, \$100. Downstream, the rate from Fort Selkirk to St. Michaels is \$60, and proportionate rates for intermediate points. First-class ticket from St. Michaels to San Francisco, \$120; from San Francisco to Dawson, with an allowance of 150 pounds of baggage, \$175; to Circle City, \$150.

The freight rate upstream is calculated on the basis of 53 cents per ton per running hour, the minimum rate from St. Michaels to Circle City being \$100 per ton; to Forty Mile, \$128; to Dawson, \$136, and to Fort Selkirk, \$150. Downstream the rate is 55 cents per ton per running hour, the minimum rate from Fort Selkirk to St. Michaels being \$70 per ton; from Dawson, \$65; from Forty Mile, \$61, and from Circle City, \$53. It should be stated in this connection that the rates given

for upstream traffic are nominal, as the companies do not carry freight upstream for the general public except in rare cases. The rate for dogs is one-third of passenger rates if in charge of owners; from below Nulato, \$40 per head. Live stock, full passenger rates; minimum charge (other than dogs), \$15 per head.

As detailed under the head of Dawson, the result of the season's navigation was the landing at that place of only 2,930 tons of freight, which is within a few tons of the carrying capacity for one trip of the entire fleets of both companies—a very poor showing, and one that must be attributed to the mistake that has been made in the past of attempting to run the entire length of the river with boats that are too large to navigate successfully that portion of the stream between Fort Yukon and Dawson. It is the unanimous opinion of experienced steamboat men here that no better results can be attained until the companies introduce boats of lighter draft for the upper river, using their larger boats to transport freight to Fort Yukon, and making that place the distributing point for the upper river. A model boat for the lower Yukon would be one 220 feet in length, 36 to 40 feet beam, and 5 feet depth of hull, built on rather broad lines, and equipped with poppet-valve engines of 2,250 horse power. Such a boat could carry 800 tons with 4 feet draft, could make eight round trips during the season between St. Michaels and Fort Yukon, and, in cooperation with three small boats of 200 tons each and of high power, could land in Dawson every season 6,000 tons of freight, or enough to supply the present population of the district.

Capt. E. D. Dixon, an old Mississippi River steamboat man, now in the employ of the Alaska Commercial Company, has furnished the following statement:

The navigation season on the Yukon usually extends over a period of four and a half or five months. The ice breaks up at the Pelly, 2,155 miles from the mouth of the river, from the 1st to the 10th of May, and the upper river clears at the rate of about 100 miles a day, the ice finally running out of the mouth of the river about the 1st of June. Norton Sound becomes free of ice from June 20 to July 1, and the ocean steamers can generally get to St. Michaels during the first week in July.

From St. Michaels to the mouth of the Yukon, a distance of sixty miles across Norton Sound, there is never less than four feet of water at high tide, while at extremely high tide there is a depth of five or six feet, and sometimes as much as ten feet. During low tide there is frequently less than two feet of water at the mouth of the river.

The Aphoon mouth is about half a mile wide. There are four or five mouths to the river, separated by long, narrow islands. Just above the islands that split the river into its various mouths it is about four miles wide at high water; at low water the main channel is not more than four or five hundred yards, but it is very deep.

The Yukon River, from the time you enter the Aphoon mouth until you get to old Fort Adams, a distance of 1,250 miles, has about the same current as the Mississippi from Alton to St. Paul, and is very deep. From old Fort Adams to the Tanana, a distance of fifteen miles, the current runs about five miles an hour. From the Tanana to the

Rampart Rapids, a distance of fifty miles, the current is about four and a half miles an hour. The water begins to get swift about four miles below the rapids, and there is a six and a half to a seven mile current until you reach a point three miles above the rapids, which are two miles long. There is plenty of water along there. From there to Fort Hamilton, at the head of the ramparts, the current is four miles an hour. Then you strike the Yukon Flats, where the river gets very wide. There are a great many channels, with islands and dry gravel bars between. At the head of each of those bars there is a riffle, and the water is very swift on the riffles, running from four and a half to six miles an hour. Those riffles average about a mile in length. After passing through a riffle you strike slower water, with a current of perhaps three or four miles an hour. There is a succession of these riffles until you get to White Eyes, seventy miles below Fort Yukon. At White Eyes in high water the river is eight or ten miles wide, with many channels, but in low water there is only one channel and the river is not over two or two and a half miles wide. From there up to Fort Yukon the current gradually increases and the river gets shallower. I have never seen the river with less than six feet of water at any point below Fort Yukon. The shallowest riffle is at White Eyes, and the lowest water I ever saw there was six feet, and that was the lowest water known there for years. At a medium stage of water there is sufficient depth at Fort Yukon. The steamers have been running in the wrong channel. The bed of the Yukon is composed of gravel, similar to that of the Ohio River, and the channels never change except in the spring of the year from the effect of ice gorges. When these occur and get a sufficient head of water to move the gravel it sometimes makes a change in the channel. The channels do not fill up from sedimentary wash. The Yukon is not one-half as muddy as the Mississippi. The Lower Mississippi at low water is muddier than the Yukon at high water. From White Eyes to Fish Camp, twelve miles above Circle City, the current averages about five and a half miles an hour. It runs swifter than that on the riffles, of course. From Fish Camp to Dawson we have a narrow river, averaging about half a mile in width, with an average current of six miles an hour. In ordinary stages of the river there is from six to seven feet of water on the highest bars. The Yukon is an ideal river for navigation. There are no rocks, no bowlders, and no snags to hinder navigation. All the rocks in the river are easily located by the breaks the current throws over them, and they are all near shore. It is one of the prettiest rivers under the sun to navigate. Owing to the frozen condition of the banks they do not cut even in the swiftest places. If it was not for the frost in the ground this river, with its swift current, would cut the banks and wash and spread so that it would be impossible to navigate it. It is a very deep river. There are places where you can not find bottom with an ordinary line. At Nulato and some ways above the Russian Mission the river is quite narrow, not over a mile and a half wide and very deep. It carries there about half the volume of water that the Mississippi carries at New Orleans. There is always plenty of water in the river during the warm season. A great drawback is the early frost at the head waters. When the frost comes it diminishes the volume of the small streams and stops the snow water from coming in out of the small gulches, and that produces low water in the main river.

The Yukon could be navigated successfully if we had Mississippi River steamboat men as captains, pilots, and engineers. Nearly all the men engaged in handling the boats here are deep-water sailors. While

they are good deep-water sailors, they do not know anything about currents and sand bars. After a Mississippi pilot makes a round trip on this river he can read it like a book. He understands locating reefs, shoal places, and landmarks. The Indian has no such faculty and has proved a failure as a pilot. He steers by instinct only, and as soon as it becomes dark he loses his head. Fortunately we have daylight nearly all the time throughout the navigation season.

The fuel question is one that bothers us greatly on the Yukon, especially on the lower river. For the first 600 miles from the mouth of the river we are obliged to depend entirely upon driftwood. This driftwood comes from the upper river and lodges on the shores and on the islands, and the Indians chop it. That is all the fuel we can obtain there. The timber has been destroyed by the action of the ice in the spring. There are islands a mile long and half a mile wide, which were formerly well timbered, that have been denuded of every vestige of timber by the action of the ice, which sweeps over the islands in the spring break-up and cuts trees off like grass blades. Eventually we will have to resort to the use of coal. There is an abundance of coal from the Tanana up, and there is good coal only forty-five miles above here [Circle City], and right at Forty Mile. There is splendid coal in the Lower Ramparts, thirty miles this side of Minook. I have been in the bank myself and took out enough to try it, and I found it first-class coal for making steam. We have to pay \$4 a cord for all the wood we buy for use on our boats. When we run out of wood between yards we land at the first drift pile and all hands go to work with axes and saws and cut wood. We carry from twelve to fifty Indians—as many as fifty and never less than twelve—for this work and pay them \$1.50 a day; sometimes \$2 a day in the fall.

There is some complaint about supplies being so dear in this country. They are not as dear here as they were on the Missouri River during the boom days in the Black Hills. The expenses of transportation and the maintenance of large trading posts and stores have got to come out of what the companies get for the supplies they sell in this country. They have got to construct their boats here, which makes them cost twice as much as they do back home. It cost \$325 a day to run the *Bella* this summer. Then the greater part of the crew must be paid and fed for the entire year; whereas, back home, when a boat is laid up for the winter, the crew is discharged and seeks other employment until the opening of navigation. The *Bella's* crew at the present time consists of twelve men, all of whom are under pay the year round. I receive \$2,500 a year; the engineer, \$120 a month; the mate, \$100 a month; the cook, \$75 a month; the cabin boy, \$30 a month, and three Indians receive \$1.50 a day each. I do not know the wages of the deck hands, as they were hired below. Besides all this expense there is the item of repairs. Our wheel and rudder are badly broken, and we must whipsaw lumber to make repairs. It costs a mint of money to run a boat under such adverse conditions.

Last winter the *Bella* laid up at Fort Yukon. The river opened on May 17, and on May 26 we started for Dawson, with one barge in tow and about 275 tons of freight. We came to Circle City and took on about as much more freight and 225 passengers, and landed at Dawson on June 2. We left the same day for Forty Mile, loaded there with 120 tons of freight and forty-five passengers, and returned to Dawson, arriving there June 5. In the evening of the same day I took my barge in tow and left for Sixty Mile for a load of lumber. We arrived there the next day, and leaving the barge with men to load it, we went on to

White River, with Mr. Harper and Mr. Ogilvie, the surveyor, aboard. We came down from White River on the 7th, hitched on to the barge, and reached Dawson that evening. On the 8th we came down to Forty Mile, and on the 9th we went down to the wreck of the steamer *Arctic*, five miles below Forty Mile, and took her machinery out and put it on the barge, and left on the 13th for the mouth of the river. We got down to the mouth June 23, and laid there two days, waiting for the wind to go down so that we could cross the sound. Then we crossed to St. Michaels and were there three days. We started up the river on our first trip June 28, with one barge and 450 tons of freight, and got to Dawson July 15. We left Dawson July 17 and got to St. Michaels July 25. We loaded up again with 450 tons of freight on one barge, and left St. Michaels July 27, with 39 passengers, arriving at Dawson August 17. Returning, we left Dawson August 18 and reached St. Michaels August 27. We loaded up the steamboat and two barges with 750 tons of freight and started up the river August 31 with 21 passengers. We left one barge at Andreafski and brought the other barge, drawing four and a half feet, to Rampart City. There I put off 90 tons of freight. That lightened the barge up to four feet. Then we came to Fort Hamilton, where I lightened the barge to 26 inches; then we came to Fort Yukon, where we unloaded the barge and the steamboat, and then reloaded the boat with 125 tons of bacon, flour, beans, lard, sugar, tea, and coffee, and proceeded up the river. We left 37 tons at Circle City and put the remainder into Dawson, arriving there September 30. We left Dawson on October 1 and arrived at Circle City October 13, with 126 passengers, having been caught for nine days in the ice on the way down. The *Bella* is now in the mouth of the slough at Circle City for the winter.

The details given by Captain Dixon relative to the depth of water and the currents in the river will undoubtedly be found of great interest and value by pilots and other steamboat men who contemplate entering this field.

The captain's statement in regard to the expense of running steamboats requires some modification, as the figure given by him is merely nominal. In the nature of things the Indians who cut wood along the river have no use for money except to buy the necessities of life, and as a consequence they are paid for their wood in trade. Every steamboat has a storeroom containing an assortment of goods specially selected for the Indian trade and in charge of the purser, whose duty it is to settle with the Indians for the wood they deliver on board the boat. Wood, which now costs \$4 per cord, is paid for in flour at \$4 per sack of 50 pounds; calico, 3 yards for \$1; tea at \$1 per pound, and other articles in like proportion. The flour, which costs \$1.20 per hundred in San Francisco or Seattle, is what is known as "trading" flour, a product which the white man avoids except under stress of impending starvation, but which the Indian is glad to get at any price, because he can do no better, and the tea is of a low grade that sells for about 15 cents per pound at retail in the United States, when it sells at all. Stark Mills improved standard drilling (A) is exchanged at 50 cents per yard, and smoking tobacco that sells for 5 cents a package outside is taken with avidity by the Indians at 50 cents, while they accept at

the same figure per pound, but with somewhat less enthusiasm, a quality of leaf tobacco known as "sheep dip" in the pastoral communities of our western States. It is interesting to note the movement of prices during the past few years in the traffic with the Indians on the river. Formerly the Indians charged \$1.50 per cord for wood, and the companies paid for it in trading flour at \$1.50 per sack of 50 pounds, and other commodities in like proportion as compared with present prices. With the influx of the superior race the Indians learned in some degree the value of money, at least so far as abstract units are concerned, though it is doubtful whether the full significance of the term "purchasing power" has as yet reached their inner consciousness. This new knowledge created a discontent which resulted in an advance in the price of wood to \$2.50 per cord. The companies cheerfully accepted the new rate and at the same time raised the price of flour to \$2.50 per sack, the prices of other articles being increased in like proportion. After a season or two it began to dawn on the aboriginal intellect that the advance in price had not been accompanied by a corresponding increase in the comforts of life, and the price was raised to \$4 per cord, the companies again meeting the demand with prompt acquiescence and a concurrent increase in the prices of their commodities. Here again we have an Alaskan paradox, for the Indians are still dissatisfied with the price they receive for their wood, although it has advanced within a comparatively short period from \$1.50 to \$4 per cord, while the companies, on the other hand, view the increase with complacency, born, of course, of the knowledge that they are getting their wood for what it has always cost them, something less than \$1 per cord. It would seem, in view of the exceedingly favorable terms on which the steamboats secure their fuel, that the Indians, in receiving payment in goods, might be granted at least the choice of selection; but in many cases, as the last sticks of wood are being carried aboard, the whistle is blown and the lines cast off, while the purser thrusts into the hands of one or two of the Indians packages of flour, tea, tobacco, etc., and hustles the crowd down the gangplank to divide their pittance among themselves on shore as best they may.

. While the showing in tonnage of freight transported up the river during the past season was exceedingly poor, as stated, the companies were even less successful in handling the passenger traffic. Up to September 3, 1897, the date on which the last steamboat to reach Circle City left St. Michaels, the following-named vessels, which sailed from ports on the lower coast after the commencement of the Klondike "boom," had arrived at that place with the number of passengers indicated: *Humboldt*, 267; *Excelsior*, 113; *Bertha*, 13; *Portland*, 155; *Cleveland*, 163; *National City*, 50; *South Coast*, 45; total number of passengers, 806. At the date named fourteen more vessels were expected to arrive at St. Michaels before the close of the season with probably 1,000 passengers. Of this large number only 72 got as far as Circle City,

and but 38 of these succeeded in getting to Dawson, while about 350 reached Fort Yukon, about 20 remaining there for the winter, and the others returning to various points down the river.

H. T. Watkins, M. D., of Olney, Ill., who was a passenger on the *Cleveland* and who reached Circle City on the *St. Michael*, has furnished the following interesting statement relative to the difficulties experienced in getting up the river:

It is with pleasure that I comply with your request for a statement in detail of the trip of the stern-wheel steamer *St. Michael* from the island of St. Michaels to Circle City, Alaska. On the morning of August 18, 1897, the steamer *Cleveland*, which left Seattle, Wash., August 5, dropped anchor in the harbor of St. Michaels with 160 passengers bound for Dawson, Northwest Territory, Canada. When these passengers got ashore they found the news from up the Yukon River of such a disquieting nature as regarded the food supply at upriver points that each one at once began to devise ways and means of taking provisions along with him. The two transportation companies absolutely refused to carry more freight than 150 pounds of baggage for each passenger. Mr. Shepherd, the agent of the North American Transportation and Trading Company at St. Michaels, defended the position of the company to a committee of five appointed by the passengers of the *Cleveland*, by stating that it would be unfair to the men already in the country without food to carry food for individuals, but that all should share alike when their boats should reach their destination. While these conferences between the trading companies and their passengers were taking place the stern-wheel steamer *St. Michael*, 14½ tons burden, belonging to the Jesuit Mission at that place, came into port. Sixty passengers at once formed a cooperative association called the Y. M. C. A. (Yukon Miners' Cooperative Association), and bought the boat and her barge for \$10,500, assessing each member \$200. After buying the boat they had \$1,500 left for the incidental expenses of the trip. They drafted by-laws for the government of the association, the executive part of the business being put in the hands of five directors, who selected a volunteer crew of sixteen men from the sixty stockholders. Each man was paid \$1 for the trip. None of the crew understood anything about steamboating excepting Capt. E. T. Barnette, of Helena, Mont.; Thomas Marshall, of Gloucester, Mass., mate, and W. L. Thompson, of Galway, Ireland, second mate. The engineer was Charles R. Stewart, of New York. The balance of the crew was fully represented by a lawyer, a doctor, clerks, drummers, miners, and a poor, lone tramp printer. Each share of \$200 represented a one-sixtieth interest in the steamer and barge, and entitled the shareholder to the privilege of transporting 1,000 pounds of freight to Dawson or any intermediate point on the river, but not to passage for himself. All the stockholders, except the crew, took passage up the river on the steamer *Healy*. Each stockholder gave the secretary a list of the kind and amount of provisions he wished, and the aggregated amount of each kind of provisions was bought and loaded on the boat and barge in a common cargo of thirty-five tons, including the baggage of the crew. On the morning of August 29 the *St. Michael* put to sea, bound for the Yukon River. The sea was too rough for a boat of her size. The swells at times lifted the stern of the boat clear of the water, and her wheel at such times would make two or three rapid revolutions in the air and the next minute be half submerged in the succeeding swell. She put

back into the harbor of St. Michaels and traversed the canal that passes through the island, at the mouth of which she laid over until night, when she made the run across Bering Sea to the mouth of the Yukon River, which was reached early the next morning. Here we had great difficulty in entering the river. Our Indian guide, called by courtesy "pilot," apparently did not understand the route into the river by the main channel, for after putting the boat hard aground the second time that morning he lost his head completely, and the only expression we could elicit from him was, "Me no savey, me no savey." After great labor with capstan and spar the boat was worked into deeper water and the anchor dropped, and a channel deep enough for the boat to enter the river was found by sounding in a rowboat ahead of the steamer. Six hours were lost here in getting off the bar and hunting a deep channel into the river, and the boat barely reached fuel in time to escape the predicament of being practically at sea without motive power, as we were burning our last cord of wood when we reached the first wood pile on the Yukon. Our Indian guide had often piloted this same boat into the Yukon River, but never before with a cargo, and had been in the habit of entering the river regardless of channels. Unloaded, the steamer drew about eighteen inches; loaded as she was, her draft was three feet nine inches, and this explained the failure of the Indian guide. The deepest water we found at the mouth of the river was four feet, but we had missed the opportunity of entering the river at high tide.

The greatest difficulties encountered, aside from some troubles that occurred between the stockholders in the enterprise during the latter part of the trip, were the finding of trustworthy pilots and securing wood for fuel when needed and in getting through some stretches of very rapid water encountered on the trip. If the captain and the two mates of the *St. Michael* had not been good judges of bad water it would have been impossible for the boat, manned as she was, to accomplish her passage of 1,750 miles up the river. During the early part of the trip the Indian pilots took their turn at the wheel with the captain and the mates, but they very soon proved their inefficiency by getting into shoal water and on bars and were relieved of this duty entirely and used merely as guides to the river, it being difficult to find the main channel without them, as the river is cut into many channels by islands so large that to a stranger to the water they have the appearance of being the mainland. In justice to the Indian pilots on the other boats plying the river it must be said that it is very probable that we had to deal with men that were not experienced pilots, as it is likely that the transportation companies have all the experienced river pilots in their employ.

Another trouble which arose in dealing with the Indian guides arose from the fact that they have no sense of honor as regards contracts. None of the guides was paid less than \$4 a day, yet one of them struck for higher wages four times in coming a distance of 150 miles. We acceded to his demands each time, but when we reached his stopping place we paid him, as per original contract, \$4 a day.

At noon on September 4 we reached the Holy Cross Mission, 370 miles from St. Michaels. Here we stopped to get some tools belonging to the boat and visited the mission school for the education of Indian children. It contained about thirty boys and thirty girls. This is the only point on the river where we saw a pound of food that had not been imported into the country. Through the kindness of the mother superior and Sister Mary Winnifred we were shown through the garden of the

mission. This garden was planted in the middle of May, two weeks before the ice broke up in the river, and was worked at night, as at that season of the year this is the land of the midnight sun. The garden contained potatoes, cabbage, rutabagas, turnips, and cauliflowers. The sisters had a hill of potatoes dug in our presence, and it contained fifteen large and three small potatoes, fully matured. The cabbages were large and the heads solid and firm. They were of the Early Jersey Wakefield variety, the only kind found by experiment to mature into solid heads in this latitude.

Up to the time we reached Nulato, 630 miles from St. Michaels, where we arrived September 8, no difficulty was experienced in regard to fuel. Plenty of cord-wood was found for sale at the uniform price of \$4 a cord. This was paid for in money and in trade. At the missions and trading posts the Indians demanded money for their wood; at their huts, remote from posts or missions, they were paid in trade—four cupfuls of sugar or tea for \$1. This trading tea was vile stuff. Calico was accepted by the Indians at 25 cents a yard, and other articles at the same ratio. During the latter part of the trip cord-wood was scarce, and the crew almost daily had to cut the wood for a day's run. The boat would be stopped at drift piles and the wood put aboard in long lengths and cut for the furnace while the boat was in motion. Often we could not make a landing at the drift piles on account of shoal water near the shore. In such cases the anchor was dropped and the fuel loaded on the steamer with a rowboat. For a distance of thirty miles above Rampart City (Minook Creek) dry wood of any description was exceedingly scarce. There is plenty of green wood, which we attempted to burn, but we could not keep steam up with it. During this time of scarcity of fuel we discovered a vein of coal about eighteen miles above Minook Creek. The boat was stopped and about two tons of coal dug from the mountain side and loaded aboard the boat. The quality of this coal was very poor, and the most of it was dumped overboard the next day, having slacked to dust in that time. In my judgment this question of ready fuel for boats next year will be the key to the solution of the problem of supplying sufficient food for the increasing number of people coming into the country. If the number of boats plying the river is very largely increased next year, the demand for ready fuel will far exceed the supply.

The steamer met with several serious accidents on the way up the river. Two blow-outs of the connections in the steam pipes delayed us seriously on the trip, as we had to lay up until the damage was repaired. The first accident occurred on the second day out, while the boat was wooding, and the second occurred just below Rampart City. This last accident completely disabled the boat in midstream. The Stars and Stripes had just been hoisted on the flagstaff, so as to go into the city with colors flying, when the exhaust suddenly stopped. The boat was immediately enveloped in steam and began to drift helplessly down stream. She drifted about a mile, when she was gotten under control sufficiently to make a landing, when the damage was repaired. We lost about twenty hours in making the repairs necessitated by these blow-outs. An accident to the machinery of a boat plying this river is a serious matter unless the boat carries duplicate parts for her engines and steam connections, which the *St. Michael* had only in part, for they can not be replaced on the river or anywhere on the coast short of Seattle or Portland.

Early in the morning of September 7 the dreaded cry of "Fire!" was heard aboard the *St. Michael*. The captain was at the wheel at the

time. He placed it in charge of the mate and came below, and found on investigation that the timbers beneath the fire box were burning. He ordered all doors and windows closed and excluded the air from the fire as much as possible by the use of sacks of flour and corn meal. The boat was run about a mile upstream and a landing made, where the smouldering fire was extinguished. It was impossible to make a landing sooner on account of long stretches of bars and shoal water on either shore. This part of the narrative of the trip should not be passed without saying that in all probability the career of the *St. Michael* would have ended at this point if it had not been for the coolness and rare presence of mind displayed by the captain and the fidelity in the execution of commands shown by the two mates in this hour of rare danger.

We reached Minook Creek (Rampart City), 1,000 miles from St. Michaels, at 8 a. m. September 14. Here we found fourteen of our stockholders, who preferred remaining at that point to proceeding farther up the river, as the steamer *Hamilton*, returning down the river, had reported that it was impossible for boats to proceed farther than Fort Yukon on account of the low stage of water in the river. Their share of the cargo was given them and the journey continued. At Minook we learned the sad news of the death of H. B. Tucker, by freezing. He was from Troy, N. Y., being a son of the proprietor of the Troy Press and a stockholder in the steamer *St. Michael*. The circumstances attending his death were peculiarly sad. He started with three companions to go fourteen miles up Minook Creek for the purpose of locating a placer mining claim. Each man took a pack containing two blankets and food for two days. They reached the ground and located their claims the next day, and started back to Rampart City, at the mouth of Minook Creek. The party became separated, two going one way, and Mr. Tucker and Mr. D. P. Powell, of New York, taking another route. Night overtook Tucker and Powell before they reached their destination, and they built a fire and camped for the night on the trail. It had been snowing all day, and the snow continued to fall throughout the night. The next morning they breakfasted on two sea biscuits and a cup of coffee, all the food they had left, and resumed their return journey. After traveling about three hours, Mr. Tucker complained of being very tired. They rested a while, and before resuming their way, Tucker said that he was very chilly. After walking another hour he wished to rest again, but his companion urged him to continue walking, as he was afraid they might not be able to reach their destination before night, for the walking through the moss and wet snow with which the country was covered was very difficult and slow. In a short time Powell noticed that his companion was not following him, but was wandering blindly from the trail in the opposite direction. He went to him and said, "Tucker, this is no time for pranks." To this remark he received an incoherent reply. He then realized for the first time that Tucker's condition was serious. He led him back into the trail and urged him on before him. In a short time Tucker sank to his knees, and could not be urged farther; in fact, he could not be roused sufficiently to elicit a reply to questions as to his condition. Powell then placed him in a sitting posture beside a tree, wrapped all the blankets they had about him, and started for help. In the course of half an hour Powell met two men on the trail, and the three started at once to Tucker's relief, but when they reached him he was cold and stiff in death. Two days later he was buried in a rubber blanket on the trail where he died, there being no lumber at this point with which to make a coffin. This account of the circumstances attend-

ing the death of Tucker was given me by Powell, his traveling companion on the ill-fated trip. There being no civil officers at Rampart City, the stockholders of the Y. M. C. Association held a meeting aboard the *St. Michael* September 15 and appointed Mr. Frank Gleason, of Davenport, Iowa, and Mr. George M. Reed, of Boston, Mass., joint custodians of Mr. Tucker's effects. His 1,000 pounds of food aboard the boat was sold for \$123.85, the amount expended in its purchase at St. Michaels, and placed in the ship's stores. The gentlemen named were instructed to put themselves in communication with Mr. Tucker's parents and send this money and his other effects to them. Mr. Tucker died September 11, and his was the second death occurring among the passengers of the *Cleveland*. The other death occurred on board the *Healy*, just below the Greek Mission. The deceased's surname was Georg, a Syrian, from Washington, D. C. He was buried at the Greek Mission. After a delay here of thirty-six hours in discharging a part of the cargo and repairing some steam connections, the boat proceeded on her way up the river.

Another stop was made at Alder Creek, twenty miles above Rampart City, on account of the serious illness of the captain, and also to allow the crew to locate placer mining claims on this creek, which was the center at that time of a wild stampede from Rampart City, gold being found there in paying quantities. Most of the crew located claims here, and here we got a clew to the mystery of how a strong person could freeze to death in this latitude in the month of September. All the crew, except the captain and surgeon, started up the creek early in the morning of September 16, and had to walk about twelve miles before they reached the portion of the creek not staked. All were strong, healthy men, and each carried a pack of about thirty pounds on his back. The weather was damp, but not severely cold. It had been snowing some each day for a week, and the small mountain streams had been frozen to a depth of an inch. About 4 p. m. the men began to get back to the boat and continued to straggle in until 10 p. m. With but three exceptions they were almost completely exhausted and their features pinched and haggard. After sitting down for a few minutes they would begin to shiver and their teeth to chatter. An examination disclosed the fact that each man's clothing was wringing wet, necessitating a complete change of clothing. This moisture results from perspiration, and is a source of great danger to men inexperienced in this climate. The freedom with which a person will perspire here under continued exertion is something remarkable. The cold forms a fine coating of frost on the outside of the clothing when worn to fit the body snugly, which gives it practically an impervious coating. All moisture is retained within, and it is a dangerous thing to sit down on the trail to rest when in this condition, as the chilling of the body occurs very quickly. Most persons come into this country with preconceived ideas of combating the cold. They bring the heaviest of clothing and furs with them, which are all right and necessary for use about camp or when riding, but when on the march or doing heavy work, lighter clothing is preferable, if not absolutely necessary. At the hour of 10 p. m. six of the crew had not returned to the boat, and the surgeon took a lantern and started up the trail to meet them. He met the first four about a quarter of a mile from the boat. They were badly exhausted, and told him that Thomas Marshall was behind assisting one of the men, who had completely given out. He found them a short distance farther up the trail. Mr. Marshall was carrying his own and also his companion's pack and assisting the exhausted man to walk, with an arm around his waist. The man was helped to the boat, stripped, and put

to bed, having undergone an experience which it required an Alaska climate and moss to duplicate. This man was strong and weighed 190 pounds, being a miner from Montana who had roughed it for years in the mountains of that State. His powers of endurance had been all right until he stopped with three companions toward nightfall to make a cup of coffee. He then became chilled from the wet condition of his clothing, and shortly after resuming the trail, gave out. The condition of his companions was but little better. They attempted to make a fire and camp, but could not find dry wood in sufficient quantities to make a fire large enough to dry their clothing. Mr. Marshall, who had to go the greatest distance to locate his claim, overtook them on his way back, and realizing the danger in the situation, took the exhausted man's pack and urged them all forward. The trail crossed and recrossed the creek scores of times, and the man was so weak that he could not wade the creek without being swept from his feet. At these places Mr. Marshall placed him on his back and carried him across, and when he reached the boat, after six miles of this work, he was apparently unconscious that he had been doing a noble work that day, but every thoughtful man who looked into his pinched and haggard face knew that he was a hero. Some of the men who started that morning returned without accomplishing their object on account of the difficulties encountered walking through moss a foot or a foot and a half deep. The three who came back in the best shape kept in motion all day and had no opportunity of getting chilled.

The captain's condition the next morning was not improved. He had been suffering intensely for two days with pleurisy and a form of enteritis, and the motion of the boat was agony to him. He was strongly urged by the surgeon and crew to have the boat take him back to Minook, where he could be put in a cabin and properly cared for, as the superstructure of the boat was nothing but a mere shell of thin woodwork inclosing the engine and boiler, covered with canvas, and could not be kept warm. He refused to consent to this, saying that he had promised the shareholders when in St. Michaels that as long as there was one of them above him on the river nothing short of conditions which could not be overcome would keep him from taking their food to them, and that he preferred the increased chances of death aboard the boat to a failure to keep his promise. He placed the boat in charge of the mate, and at noon, September 17, the *St. Michael* was under way again, having lost eighteen hours of running time at Alder Creek, the whole of the 16th and half of the 17th, the boat following the usual custom of the river of laying up at night.

On September 19 the *St. Michael* met the *Healy* coming down the river. She had twenty-five passengers of the steamer *Cleveland*, returning back home; also six of the stockholders in the steamer *St. Michael*. The latter were taken aboard, and the boat proceeded on her way up the river, reaching Fort Yukon on the 23d, in the evening. Here we found twelve more of our stockholders, they having been left at that point by the steamer *Healy*, her captain claiming that he was unable to proceed farther up the river on account of the low water. We learned here that the steamers *Alice*, *Hamilton*, and *Healy* had discharged their entire cargoes at this point and returned down the river. The steamers *Bella* and *Weare* had discharged the greater part of their cargoes at this point also, and proceeded up the river with light loads. The *Bella* also dropped her barge at this point, having previously discharged about one-third of her original cargo at Fort Hamlin. Why the steamer *Weare* did not pick up the passengers left at this point by the steamer *Healy* and carry them to their destination is an enigma to all

intelligent men who know the circumstances of the case. Both boats belong to the same transportation company, and all the passengers held tickets, purchased from this company, calling for transportation from Seattle to Dawson. There was no shelter for them at Fort Yukon, and it was the most inhospitable point at which to leave them, being the only trading post on the river strictly within the Arctic Circle. The twelve stranded stockholders were taken aboard the *St. Michael*. The boat was crowded far beyond her capacity, part of the men being compelled to sleep in the open air, on the canvas top of the boat. We lost twenty-four hours at Fort Yukon shifting the cargo to make room for the additional men and their effects, and left that point at 3 p. m. September 24. A man was placed on the bow of the boat, and one was also placed on the barge, with poles to sound the depth of the channel over the bars above Fort Yukon. We were reliably informed at Fort Yukon that the *St. Michael* was drawing too much water (42 inches) to get over the bars. We found at the shallowest part of the channel four and one-half feet of water.

On the evening of the 28th Circle City was reached. Ice began running in the river during that night. Part of the stockholders concluded to stop here, and their part of the cargo was put ashore, this work occupying the whole of September 29. Nineteen of the stockholders concluded to risk and attempt to proceed on the way to Dawson. The weather grew colder, and the next day, the 30th, the ice was running so thickly and the river falling so fast that the conclusion was reached to wait for softer weather. One of the factors that forced this decision was the fact that we were compelled to drop our barge here and load the remainder of the cargo on the boat. This put her eight inches deeper in the water. The barge was a double-bowed barge of twenty tons burden. Instead of moderating, the weather grew colder, and the river partially closed, freezing toward the center from both shores to a depth of eight inches. This shore ice lessened by two-thirds the navigable width of the river, leaving a narrow channel between of swift water, filled with moving cakes of ice. By October 10 the weather moderated and the river began to rise. The captain had the forward part of the boat sheathed with sheet-iron to protect her from the running ice, and also had a channel cut through the ice from the boat to the running water in the river. This channel was 30 feet wide and about 350 feet long. These preparations were made with the intention of proceeding on the way to Dawson as soon as the boat was loaded.

At St. Michael's the men who entered the cooperative scheme to buy the steamer hoped the outcome of the venture would prove a happy illustration of the benefits of cooperation, and the venture as far as Circle City benefited all the men interested. They got a year's supply of food for each into the country, and proceeded farther into the interior than any of their fellow passengers from Seattle, except Capt. P. H. Ray, U. S. A., and one other individual. These two passengers were taken from Fort Yukon on the steamer *Bella*. The cost of a share of stock in the boat and a year's supply of food for each individual amounted to less than one-half the cost of the same amount of food if bought in Circle City, not to say anything of the difficulty of purchasing food here at any price. If the boat had been a complete loss at her destination each stockholder would have been the gainer in dollars and cents from this one trip. But unhappily the tale of this trip of the *St. Michael* would not be complete if the reasons were not given for the failure of the boat to proceed farther on toward her destination. As stated previously, the weather began to moderate, a channel was cut through the ice to get the boat into running water, and the effects of the nine-

teen men who had concluded to go on to Dawson were being loaded when the first difficulty in the cooperative scheme occurred. The stockholders who intended to remain in Circle City sold their stock to other parties who wished to go to Dawson, and these purchasers claimed the same rights and prerogatives as the original purchasers of stock, and insisted on taking 1,000 pounds of freight each aboard. We submitted our difficulties to a board of arbitration, composed of Capt. P. H. Ray, U. S. A., and Mr. Charles Eaton and Mr. L. Poot, of Circle City. They decided that a transfer of stock carried with it all the rights of the original purchasers, and that each stockholder was entitled to carry 1,000 pounds of freight aboard the boat. The boat could not carry the load, and it was impracticable to take the barge, as the engine was not powerful enough to tow it through the narrowed channel formed by the ice extending from each shore. We had learned this from our experiences coming up the river. Just below the mouth of the Tanana we had had great difficulty in proceeding upstream on account of the force of the current and the absence on both shores of eddies in the water of which advantage might be taken. We eventually got up into less swift water by quartering across the river several times, gaining a little with each tack across the stream. At that point we were four hours in moving upstream one mile. Between Fort Yukon and Circle City we struck another very rapid stretch of water, and succeeded in overcoming it by the same maneuvers; but our progress through it was painfully slow. After the decision of the arbitrators, Captain Barnette decided that it was useless to attempt to go farther up the river; but we were all monomaniacs on the subject of getting to Dawson, and persuaded him to make the attempt, even overloaded as the boat would be. Accordingly, on the morning of October 15, the *St. Michael* was backed through the channel cut in the ice into the running water in the river. Here she was unable to breast the current, and after half an hour's attempt to go upstream the captain made a landing, and told the men that it was hazardous to attempt and impossible to go up the river unless half the men would consent to remain behind and allow the others to go. Each man wished his neighbor to remain but wanted to go himself. In disgust the captain resigned, and he, with the two mates and the surgeon, had their effects unloaded and bade adieu to the *St. Michael*. The remainder of the shareholders elected a new captain, employed the engineer of the steamer *Victoria* and the pilot of the steamer *Bella*, both of which steamers were at the time in winter quarters at this point, and during the afternoon of the same day made another attempt to go up the river. They left about 1 p. m., and at 5 p. m. had progressed only about one mile above Circle City. What happened there is best told in the words of one who was aboard of her. He said: "When we left Circle City the new engineer placed the safety valve at 140 pounds, 20 pounds higher pressure than she had been run with previously. At a sharp bend in the river, about a mile above Circle City, the boat was unable to make any headway against the current. At this point a steam connection above the boiler began to leak. The fireman noticed this, and cried, 'Save yourselves; the boiler is bursting.' A wild stampede occurred among the passengers and everyone lost his wits. The pilot attempted to land the boat, but before he reached the shore ice the boat struck a bar and hung helplessly there, about twenty feet from the ice along the shore. Here the crew worked all night taking the cargo from the boat, and eventually lightened her enough to get her off the bar. The next morning they reloaded her and returned to Circle City, wiser men by an additional day's experience."

If this statement of our difficulties in navigating this slightly known river shall prove of any value to others who are contemplating a like venture, we shall have been amply repaid for its preparation.

A large number of the tributaries of the Yukon are navigable for a distance of from 50 to 400 miles. The Tanana can be ascended at ordinary stages of water to the last-named distance by boats drawing four feet. For boats drawing three feet the Andreafski is navigable for 100 miles, the Koyukuk for 300 miles, and the Porcupine for 155 miles. The Stewart River can be navigated 220 miles by boats drawing thirty inches, and boats of like character can ascend the Pelly 250 miles in high water. White River is navigable for boats drawing three feet to a distance of 150 miles in high water. Lewes River can be navigated by boats drawing thirty inches from its mouth to Rink Rapids, a distance of fifty-three miles. In the opinion of experienced river men it is not possible to take a boat through Rink and Five Finger Rapids, which are about six miles apart, although, as stated in the section on The Trails, it is authentically reported that Canadian capitalists are building boats to run from the head of Lake Teslin down the Teslin (Hootalinqua) and the Lewes to Dawson. If this be so, it will be necessary to line the boats through both rapids. The distance from the mouth of the Teslin to the head of Lake Teslin is 332 miles, and a surveyor of the Dominion Government, who came down the river in October, reports that he found from one to twenty-eight fathoms of water in the lake, which is 105 miles long, and not less than five and a half feet in the river, which was at low stage at the time of the soundings. From Five Fingers to the White Horse Rapids, a distance of 217 miles, boats of three-foot draft would have no difficulty at a medium stage of water, while boats of four-foot draft could successfully navigate the upper river from Grand Canyon through the lakes to the head of Lake Bennett, a distance of ninety-nine miles. It is possible that some dredging would be necessary to enable boats to get over the shallow bars at the foot of two or three of the lakes.

Thus it will be seen that the Yukon and its tributaries constitute a vast system of waterways of about 4,000 miles in aggregate length and navigable for boats of from 200 to 800 tons, and it should be borne in mind that there are numerous streams which have not been explored that may eventually bring the figure to 5,000 miles or more. This magnificent network of navigable rivers must in the nature of things be the most important factor in the future development of the greatest mineral zone on the American continent.

The only practical means of transportation for long distances available in this country during the winter is the dog team. Horses were used last winter between Circle City and Dawson, but they proved a failure on account of the difficulty of securing feed. Dogs are used in large numbers for freighting to the mines and between points on the river, being attached to sleds by means of a simple harness constructed of light leather or strips of canvas. The standard sled is seven feet

long, sixteen inches wide, and five inches in height, made of birch and shod with steel or brass. The usual number of dogs in a team is four, but quite frequently six or eight are used and sometimes even more. A good dog team will draw 200 pounds to the dog, including the camp outfit, and from twenty to thirty miles a day can be made on a good trail. The dogs are fed on dried salmon, when obtainable, the allowance to a dog being about two pounds per day. Owing to the poor local run of salmon during the past season dog feed is very scarce, and it is necessary to resort to the use of bacon, lard, and rice, which brings the cost of feeding a dog up to about \$1 per day. As there are no trails except from points on the river to the mines, it is necessary, in order to reach the coast, to travel over the ice on the river. The Yukon, like all long rivers flowing north, freezes first at the mouth, and the mush ice from the headwaters is caught by the solid ice toward the mouth and piled up in jagged ridges from five to twenty feet in height. When the river finally closes these ridges occur every mile or so and at every bend, while the intervening stretches present an indescribably rough surface, composed of up-edged ice cakes. In order to travel on the ice at all one must wait until the snow falls to a sufficient depth to fill up the rough places, and then a trail has to be broken by the use of snowshoes before the dogs can draw the sleds. Although the river generally freezes over by November 1, it is seldom that the trail is in good condition before Christmas. The journey from Circle City to Juneau, a distance of 865 miles, has been made in twenty-seven days, but the usual time is from forty to fifty days. During January and February the temperature frequently drops to 60 or 70 degrees below zero, and the trip is one that few men care to undertake.

As there are many practical men on the Yukon who have declared their intention of remaining in the valley until they can ride to the coast in a Pullman, it may be pardonable for one who knows less than they of the difficulties involved to refer to the subject of a possible railway. There is a very strong impression here, born more of hope, perhaps, than of positive information, that steps will soon be taken to construct a railroad from the head of Lynn Canal, by way of Chilkat Pass and the Dalton trail, to Fort Selkirk. Some heavy grading would be required from Pyramid Harbor to the summit of Chilkat Pass, a distance of seventy-five miles. From Chilkat Pass to the Yukon, by the proposed route, is about 325 miles, and those who have passed over the trail state that but few expensive cuts would be necessary, as the country for the most part is made up of low rolling hills and prairies, and very little bridging would be required. The greatest advantage which a road striking the Yukon at Fort Selkirk would have over one entering the country by the Taku route, or from the Stikine to the head of Lake Teslin, would be that it would avoid the rapids in the Lewes River. It would solve the problem of transportation for the upper river section as far north as Forty Mile, as light-

draft steamers could ply between the terminus of the road and Forty Mile for five months in the year, making two round trips a week.

Captain Ray, who has given a good deal of thought to the subject, has made two reports to his Department, recommending the construction of a railroad from the head of Cook Inlet or Prince William Sound to the Tanana River and thence to Circle City, and he has asked that an officer of the Engineer Corps be sent to make a survey of the route in the spring, in time to cooperate with him. The Indians of the Tanana pass to and fro over the proposed route all winter, both to Circle City and to the trading post at the mouth of the Sushetna. The distance by this trail from the head of Cook Inlet to the mouth of the Tanana is about 350 miles, and to Circle City about 450 miles. The shortness of this route, and the fact that it communicates with the open sea, is entirely in our own country, can be operated all winter, and intersects our richest mining districts, commend it strongly to Captain Ray's favor. By making a terminal at the mouth of the Tanana, and another at Circle City, American merchants can dominate the trade of the entire Yukon Valley, not only in our own country, but in British North America. The completion of a Canadian railroad to the Yukon would be disastrous to American trade in this section, as American products would be discriminated against and Canadian merchants would do in Alaska what American merchants are now doing in Northwest Territory. As the development of the mining industries of all of Northern Alaska is paralyzed by the lack of sufficient food supplies at reasonable prices—the commercial companies, as now managed, being unable to meet even the present demand—the project of a railroad by the Cook Inlet route should commend itself to the consideration of American capitalists.

THE UNITED STATES MAIL.

Aside from the all-important question of the food supply, the greatest hardship imposed upon the people of the Yukon basin, and the one against which the most general complaint is heard, is the poor mail service. The mail contract for the Circle City route calls for a monthly letter service between Juneau and Circle City, at a compensation of \$6,999 for the year—an absurdly inadequate amount under the abnormal conditions existing here. (a) On account of the high compensation

^aIt is proper to say that the conditions relating to the mail service, set forth in the next few pages, will no longer exist after July 1, 1898. The Postmaster-General, on March 29, 1898, awarded a contract for carrying the mails from Juneau to Weare, Alaska, at an annual compensation of \$56,000. The contract provides for two round trips a month for a period of four years, beginning July 1, 1898. The contractor obligates himself to provide supply and relief stations and to stock them with ample supplies and provisions, reindeer, and dogs. The contract also calls for Laplanders, carriers, and dog teams in sufficient numbers to insure regularity of service. The principal intermediate points on the route are Dawson and Forty Mile, Northwest Territory, and Circle City, Alaska. The Canadian Government has consented to the establishment of necessary supply stations on her territory.

demanding by carriers, the great cost of supplies, and the immense prices which dogs command, it is impossible for a contractor to make any profit on a yearly contract at a less rate than \$25,000. If the contract were extended over a period of years the service could be performed for less, perhaps, as the contractor would then be justified in making proper preparations in the way of the establishment of stations, the purchase of dog teams, etc., which he can not do under a yearly contract and at present prices. At least seven round trips during the year must be made on the ice, and as a round trip consumes from three to four months, it is necessary to have four carriers constantly on the road. It is essential that their wages be sufficiently large to make it an object to return to Juneau; otherwise they are apt to remain here and let the outgoing mail accumulate, to be taken out by the first steamboat in the summer. A dog team such as would be required for the service costs at least \$1,500, and four of these would represent an initial outlay of \$6,000, or nearly as much as the present contract allows. In addition to the carrier an Indian would have to be employed to accompany each team, to handle the dogs or break trail, at a cost of \$100 or \$125 per month and subsistence. Under the most expeditious schedule that could be arranged it is probable that for seven months in the year at least eight men—four carriers and four Indians—would be constantly under pay, at an aggregate cost in wages and subsistence of not less than \$1,500 per month. The expenses during the four or five months that small boats can be used on the upper river would be considerably less; but it is probable that the outlay in wages of carriers and Indians and the subsistence of men and dogs would reach fully \$18,000 per year. These figures are not given haphazard, but are based on careful calculations made by men thoroughly familiar with the conditions, two or three of whom have carried the mail and know whereof they speak, and one of whom, after an experience of three months as a subcontractor, at a time when the compensation was larger than it is now, found himself \$3,200 out of pocket.

Mr. Joseph Demars, the mail carrier who brought in the mail which left Juneau September 6, arrived here October 12. He left Juneau August 6, with the mail for that month, being assured by the contractor that he would find supply stations every hundred miles all the way to Circle City. On his arrival at Lake Bennett, where he supposed he would find supplies and a boat, he learned that these had not been provided, and was forced to pay out all the money he had with him for passage to Dawson. He was practically penniless, and without food, suitable clothing, or blankets. His entire equipment, as he tersely puts it, consisted of Uncle Sam's mail bag, a gun, a fishing line, and his past experience. He reached Dawson August 20, where he concluded to remain a month in order to earn enough money to pay his way to Circle City, turning over the August mail to the carrier who had preceded him, and who had also been forced to stop in Dawson for

a month's employment before proceeding to this place. As stated, Mr. Demars reached Circle City October 12, and he is still here, absolutely powerless, through lack of equipment, to return to Juneau. No one blames him, but some severe criticisms of others more responsible for the present state of affairs are heard.

As a consequence of the absence of proper postal facilities, the people are forced to send their mail out by private parties, usually paying \$1 per letter, with no assurance that their letters will ever reach their destination. A very large proportion of the letters coming into the country are received through the same uncertain channels. The following notice, taken from the bulletin board in front of one of the commercial companies' stores at Circle City, gives a fair idea of the kind of mail service our citizens are forced to employ: "I will leave Circle City for Juneau in a few days. Any person having letters to send I will mail for \$1 per letter. In case I do not get beyond Dawson the mail will be turned over to reliable parties going out." As the man who signed this notice was an individual who formerly had a contract to carry the mail from Juneau to Circle City, and who, becoming disgusted with the job, dropped the mail bag on the trail, where it was picked up the following summer by his successor, it might be supposed, especially in view of his own uncertainty as to whether he would go through at all, that not many would have seen fit to avail themselves of his services, but so great was the desire to communicate with friends on the outside that a large number of persons committed letters to his doubtful care.

On account of the inadequacy and unreliability of the mail service each of the commercial companies is obliged every winter to send a man to the outside world, at an expense of \$1,500 or \$2,000, for Indians and dogs, for the purpose of carrying to the home office requisitions and information as to the necessities of the business.

American citizens in Dawson complain bitterly of a regulation which causes great delay in the receipt of letters addressed to them by their friends in the United States. All such letters are placed in the Circle City sack at Juneau, brought through Dawson to Circle City and then returned to Dawson for distribution. This arrangement, which certainly must be based on a misconception on the part of the postal authorities of the distance and the difficulties of communication between the two places, involves a useless transportation of Dawson mail for nearly 600 miles and a delay of from sixty to ninety days in its delivery.

This unsatisfactory condition relative to the mail has its pathetic side. There are hundreds of men here who have not heard from the outside for many months, in some cases even years, although they have every reason to believe they are not forgotten or neglected by the folks at home. One man, who was closely observed at the last distribution of mail, turned sadly away as the last name was called, and with

sobs in his voice said to an acquaintance standing by, "I have been here eighteen months and have not had a single word from home." By reason of the wear from constant handling, most of the letters brought in by private parties are stripped of their envelopes by the time they reach their destination. At Dawson, previous to the 1st of last October, there were three places in the town where mail was distributed—at the stores of the two commercial companies and at Carey's saloon. In each of these places the boxes were filled with letters without envelopes, and therefore in many cases with nothing to identify the persons to whom they were written. One letter, which will serve as a sample, was written in an Eastern city in June, 1894, opening with "My darling boy," and closing with, "Your anxious, but ever loving mother." The inquisitive reader, who wonders how even so much of the contents of a private letter could become known to a conscientious third person, should bear in mind that all such letters as that described are read at least casually by hundreds of men in the hope of finding letters that they know must have been written to them. On October 1 the mounted police at Dawson took charge of the mail, and it is probable that the condition there has somewhat improved.

During the navigation season a letter, newspaper, and package mail service is performed by the steamers on the Yukon, which relieves the isolation somewhat, but for seven or eight months in the year the people of the Yukon Basin are practically shut off from communication with the outside world.

On Christmas Eve, two or three weeks after the above was written, a mail containing 960 letters arrived in Circle City. The carrier who brought this mail in left Juneau October 5 and reached Dawson about the middle of November in an exhausted condition, which necessitated his entering the hospital for treatment, the mail being turned over to a freighter, who brought it to this place. There are many people here who had instructed their correspondents to address them at Dawson, and but few of this class received any mail, as the authorities at Dawson failed to forward their letters.

A word in this connection to thoughtful friends in the States: Nearly every letter received here from the outside contains one or more newspaper clippings, and with rare exceptions these clippings relate to the Klondike, a subject with which it is fair to assume that the average man on the Yukon is infinitely more familiar than newspaper writers in Eastern cities, to say nothing of the fact that the current news here is from sixty to ninety days younger than that contained in the clippings. It is respectfully suggested that it would be far more satisfactory to the people here if their friends would send them clippings giving the details of recent events of general interest in the outside world.

APPENDIX—REPORT OF THE CHAMBER OF COMMERCE
OF JUNEAU, ALASKA.

The within sketch of the resources of Juneau has been compiled by the Chamber of Commerce of Alaska, and is respectfully sent to, and by the request of, the Department of Labor, Washington, D. C.

The Chamber of Commerce takes extreme pleasure in ever holding itself at the commands of the Department, and will willingly furnish any and all data and information respecting this coast of Alaska that it may have in its possession.

Respectfully submitted.

L. G. KAUFMAN,
Secretary Alaska Chamber of Commerce.

In the autumn of 1880 the site of this present thriving city was a wilderness, covered with a forest of standing timber and a dense, tangled undergrowth of alder, salmon-berry bushes, and thorny "devil club," a mass almost impenetrable even to the beasts which were its only inhabitants. It was then that Richard T. Harris and Joseph Juneau, prospecting along the shores of Gastineau Channel, discovered Gold Creek and, following up its rocky canyon, found rich placer and quartz. The news of the discovery brought others to the scene, and the first house was brought, ready framed, from Sitka, and put up December 4, 1881, by George E. Pilz, since deceased. The building of the town immediately followed the discovery of gold. The first name given to the place was Harrisburg, but shortly after it was changed to Rockwell, after one of the naval officers then stationed at Sitka. In the fall of 1881 the citizens, thinking that one of the discoverers in the camp, Joseph Juneau, had not received the full measure of honor due him, held a meeting and again changed the name of the town, from Rockwell to Juneau.

By the beginning of 1882 the population of Juneau had increased to about thirty persons, principally miners from Wrangell and Sitka. Some of those from Sitka were thirty days, or even more, making the voyage, owing to the rough weather which frequently prevails in that latitude during the winter months. One party lost its course, and having no chart went nearly around Admiralty Island, exploring almost every bay and inlet between Sitka and Juneau. Another party was blown ashore on an island in Stephens Passage, the canoe wrecked, and most of the effects washed away by the surf, and over a month was consumed in completing the trip. Other similar disasters were of frequent occurrence. One coming to Alaska now on the floating palaces which ply regularly between her ports and the centers of trade can scarcely realize the hardships, privations, and sufferings endured by the pioneers of the district. The sole capital of many of these men

consisted of a sack of flour, a side of bacon, a few pounds of beans, an ax, pick, shovel, and canoe. The hardships did not discourage these sturdy men, for they knew that gold, and plenty of it, lay in the basin above them, and they set to work cutting down the monarchs of the forest and building cabins for their shelter during the long months of the approaching winter.

Several cabins were constructed during that fall, a few of which are still to be found on the town site, but the greater number have been replaced by large, substantial buildings. These cabins, while small, are not in the least uncomfortable in which to spend the long winter months of Alaska, and many a pleasant evening was spent during that season by these few pioneers who unconsciously located what was soon to be the metropolis of the district, the picturesque, progressive, and important city of Juneau. Although the selection of the town site was made without reference to natural advantages except its proximity to the basin passes, it is yet true that had the sole object of these pioneers been the selection of a site for a purely commercial instead of a mining town, no more perfectly adapted place could be found, either as a distributing point for the surrounding mines and for the interior or for the transshipment of goods to other coasts or inland points. A sheltered harbor with good anchorage, ample facilities for wharf construction, central location, and many other natural advantages leave little to be wished for.

The first miners' meeting ever held in Alaska convened in the "Flag of All Nations" in February, 1881. At that meeting a code of mining laws was framed for the Harris mining district, which district includes all of southeastern Alaska except the districts of Sitka and Wrangell, and Richard T. Harris was elected the first recorder of the district. R. Dixon and Judge Henry States succeeded Harris. John G. Heid was the next recorder chosen by the people, and served a term as such for several years.

Juneau is the only city in Alaska which has been granted a United States patent for its town site. The town-site entry was made October 13, 1893, under the act of March 3, 1891. John Olds was the first trustee appointed, who was succeeded by Karl Koehler, and was in turn succeeded by the present incumbent, Thomas R. Lyon. A patent for the town site was issued September 4, 1897, and about the middle of October the first deeds for town lots in Juneau were issued. The patentable acreage in the town site of Juneau was 108.49.

By reason of her favorable situation, with respect to the immense adjacent quartz mines and as the supply and transfer point for the interior, Juneau has, in the short period since the first discovery of gold in Silver Bow Basin, gained a supremacy in population and a commercial importance far in excess of any other city north of Puget Sound. Juneau is the key city of the far northwest—a busy, business-like, cosmopolitan town of about 3,000 permanent residents. The population is largely augmented during the winter season by prospectors and miners

who are prevented by the severity of the climate from the pursuit of their summer callings and in summer by tourists who flock hither, attracted by the grandeur of its unsurpassed scenery. During the three years just passed Juneau has had a marked and steady growth, until now, instead of the miners' cabins and the makeshift trading stores there have appeared substantial residences and modern business blocks, of which larger and more southern cities might well be proud. The principal streets are laid with heavy plank pavement; all streets have sidewalks of ample width; a thoroughly modern electric plant furnishes the city with both incandescent and arc lamps; a water system, excelled by none on the Pacific coast, furnishes water for both domestic and fire purposes, and a citizen volunteer fire company, thoroughly equipped with carts, ladders, hose, fire extinguishers, and all the latest paraphernalia, keeps careful watch that the city is not devastated by fire.

In the fire department Juneau takes special pride. Hydrants are placed at frequent intervals throughout the town, the very reliable water supply being stored in reservoirs on the hillside at such elevation as to afford ample pressure at all points, thus obviating the necessity of fire engines. The fire apparatus is well housed in suitable buildings. Watchmen are kept constantly patrolling the city during the night, to give instant alarm at the breaking out of any conflagration. In addition to the great fire protection afforded by the water supply the waterworks provide power for more than a dozen large manufacturing establishments. A telephone system, liberally patronized, connects Juneau with the mines in the basin immediately back of the town, with Douglas City and the great Treadwell group of mines situated on Douglas Island immediately opposite Juneau, and also with the large mining settlement at Sheep Creek, about four miles from the city.

Juneau, through the Federal Government, offers every educational facility found in cities of corresponding size in more civilized centers. Besides the free schools, there are a number of educational institutions maintained by private enterprise; no less than five religious organizations hold services in their own church buildings; a large, conveniently situated, and well-appointed hospital is conducted by the Sisters of Charity; one free and two private circulating libraries furnish the latest reading matter to the residents of the town. The Alaska Chamber of Commerce, composed of the representative business and professional men of the city, diligently watches over the commercial and financial interests of the entire district.

Three principal and a dozen minor transportation companies run steamers regularly between Puget Sound and Pacific coast ports and this town, giving to Juneau an average of about five steamers each week. Three commodious wharves furnish ample dock facilities for these steamers. The largest wharf has a deep-water frontage of 700 feet, and its warehouse floors cover a space of more than 30,000 square

feet. The following report of the Pacific Coast Steamship Company shows the amount of merchandise discharged at these wharves by this company alone during the past season: Freight handled at Juneau City wharves from April 1, 1897, to April 1, 1898—Received, 16,751 tons; forwarded, 3,934 tons; total, 20,685 tons.

Exclusive of the various mining and milling companies having their principal place of business in Juneau, the business, professional, and industrial interests of this city may be summarized as follows, each establishment being enumerated once, only bona fide and distinct business establishments being enumerated:

Architects.....	2	Groceries (exclusive)	2
Assayers	2	Guns and ammunition	4
Attorneys at law.....	18	Hardware stores.....	5
Bakeries	6	Harness makers	2
Banks, State.....	2	Hay and grain.....	2
Barber shops	6	Hospital	1
Blacksmiths.....	2	Hotels	6
Boarding houses.....	6	Insurance offices.....	2
Boat builder.....	1	Iron works and machine shop.....	1
Bonding company (goods in transit).....	1	Jewelers and watchmakers	3
Boot and shoe store (exclusive)	1	Laundries.....	6
Breweries	2	Lodging houses	12
Butcher shops	4	Lumber yards	3
Cabinetmakers	2	Merchandise brokers	6
Carpenters and builders	10	Millinery stores	3
Carpet-cleaning works.....	2	Newspaper and printing offices	2
Churches	5	Painters and paper hangers	5
Cigar and tobacco stores (exclusive).....	4	Photographers	2
Cigar factory.....	1	Physicians and surgeons.....	6
Civil engineers	3	Pile driver and marine builder.....	1
Coal bunkers.....	2	Saloons	30
Confectioners.....	2	Shoemakers	5
Curio and variety stores	2	Stationery and book store	1
Dancing halls	3	Steamship offices.....	3
Dentists.....	3	Surveyors.....	4
Draying and freighting.....	4	Tailors.....	5
Dressmaking establishments	6	Taxidermist.....	1
Drug stores	4	Telephone company	1
Dry goods (exclusive)	1	Theaters	3
Electric light and power company ..	1	Title abstract company.....	1
Fruit and produce.....	3	Undertaker	1
Furniture stores.....	3	Upholsterers	2
Furriers.....	3	Woodworker (other than carpenter).....	1
General merchandise and Yukon outfitters.....	12		

Alaska has all the professional men, clerks, mechanics, and laborers she needs or can accommodate at the present time. Mining men with capital and prospectors who can bring a substantial stake and who can aid in the development of the country are about the only classes to whom the field is open, and to them Alaska offers splendid inducements. Wages here are not as high as the outside world seems to suppose, but all comers may be assured of adequate compensation for their labors. Skilled laborers are very well paid.

Juneau, from its geographical situation and from the number, experience, and capabilities of its merchants, is the logical outfitting and supply point for the mines of the coast and the interior. The prospector, bent on exploring the gold regions of the interior, first comes to Juneau, purchases his outfit and supplies, and then decides as to which route he shall take to the interior. Good-sized boats ply regularly between Juneau and Wrangell, Taku Inlet, Pyramid Harbor, and the head of navigation on Lynn Canal.

Juneau is the center of the Harris mining district. Tributary to Juneau is a vast mineral belt, upon which are mills containing, approximately, 1,500 stamps and furnishing employment to about 5,000 people. A short sketch of this mining district may be of interest to the Department.

Four miles from Juneau, at the head of Gold Creek, lies Silver Bow Basin, where Juneau and Harris made their first discovery of auriferous quartz. Here the development of properties has been steadily carried forward. All the claims are highly productive and their permanency assured. The first attempt at milling in this basin was made by the Johnson Mill and Mining Company, which built the first wagon road to the falls, where it erected a mill to work the ores from the mines now owned by the Ebner Gold Mining Company. In 1887 George E. Pilz erected a small Huntington mill on the property now being operated by the Alaska-Juneau Gold Mining Company. The veins of the Silver Bow Basin have a general trend from southeast to northwest, with a dip about three feet in ten, and are classed as contact-fissure veins, the reef having a black slate hanging wall and a greenish-colored gneiss foot wall. Between the walls of the contact a space of several hundred feet intervenes, which is filled in with schists, quartz veins, and vein matter. The filling is network from knife-blade seams to several feet in thickness, although the general trend of the main vein is in the direction of the strike on the reef. The character of the ore is a sulphurate of iron and galena, associated to a small degree with zinc blende, antimony, and copper pyrites, and carries both gold and silver, although generally richer in gold.

Leaving Silver Bow Basin and crossing a divide at an altitude of 3,500 feet into Sheep Creek Basin, this same vein increases greatly in silver, while the amount of gold carried is about the same. In the easternmost workings of the Silver Queen, at nearly the foot of the range, is found native and ruby silver and gray copper ores similar to the silver districts of Colorado and Nebraska; but, as stated before, it also runs well in gold, and all milling of these ores consists simply in reducing their bulk by concentration and without any free-gold saving appliances. The reef is located continuously from two to three claims in width for a distance of over six miles through Silver Bow Basin and over the range into Sheep Creek Basin to the Silver Queen, with almost continuous surface croppings the entire distance. Following still farther east along the belt, where the reef leaves the valley and climbs

the mountain side, the veins again crop to the surface, and locations are strung out from this point over another high range and through valleys and over ridges to Taku Inlet, a distance of fully eight miles. On this end are the Star of Bethlehem, Last Chance, Sheridan, and Little Queen locations, which show some very rich gray copper ores. There is no doubt of the development of this basin into one of the leading quartz camps of Alaska.

Shuck Bay has produced large amounts of placer gold in past years, though now its leads are attracting considerable attention. Of these the Red Wing group is most advanced in development, located in Shuck Basin and owned by the Windham Bay Gold Mining Company. This property was located several years ago by William Ebner, of Juneau, and others, and considerable development work has been done on the same. The ore is of a free-milling nature, carrying iron and zinc blende, galena, a trace of copper in combination with gold, and a small percentage of silver.

While the first auriferous quartz discovered in Alaska was found near Sitka, mining operations have never been vigorously prosecuted in Sitka district. During the past season considerable interest has been manifested and several very promising groups of claims have been bonded to Eastern capitalists, and the coming season will witness a great deal of development work.

The richness of the surface prospects in Sumdum district, fifty miles south of Juneau, has inspired the gold seeker with great hope for the future of the many located in the vicinity, and the promise has been fulfilled in every instance where development has been made. Most conspicuously is this true in the case of the Bald Eagle mine, which, a mere prospect four years ago, has become one of the richest and best paying properties on the Pacific coast. The ores carry very little free gold, the values lying entirely in sulphurates, these being principally pyrites, though both zinc and lead sulphurates are present in considerable quantities, the octagonal sulphurate predominating, this being the richest of all quartz, wherever found. A crusher at the mouth of the adit discharges its product into a flume, which conveys it to the mill, nearly a mile distant, at a nominal cost for handling; and its richness may be estimated by the fact that the four stamps in four days less than six months produced concentrates valued at a round \$100,000, or nearly \$17,000 per month. The average value of all ores mined is \$30 per ton.

Admiralty Island, one of the largest of the Alexander Archipelago, lies south of Juneau. It is separated from the mainland coast by a narrow channel, and its mineral belt is in common with that of Douglas Island, lying north of it. A number of claims have been located upon its ledges, which vary in character from low to medium grade, and in size from mere stringers to immense deposits, approaching or even exceeding that of the great Treadwell. Funter Bay, on the west side of the island, is one of the most promising locations.

Upon Douglas Island there are now dropping 480 stamps in the mills

of the Treadwell and the Mexican companies, the first of which has made this island famous the world over. The reef upon which these mills are located extends two-thirds the length of the island, and upon it have been located numerous claims. The Treadwell has recently let a contract for the erection of 520 additional stamps, which, when in operation, will make this group of mines the largest that the mining world has ever seen.

Like the mother lode of California, the mother lode of Alaska, or the great mineral belt which extends along the coast of southeastern Alaska, just back from the water's edge, and which never fails to pay the careful prospector, has of course its spots of unusually rich value. At Berners Bay, forty miles north of Juneau, on Lynn Canal, there was discovered some years ago ore of splendid promise. The principal mines in this very rich district are those of the Berners Bay Mining and Milling Company, the Jualin Mining and Milling Company, and the Portland and Alaska Mining and Milling Company. The Aurora Borealis has recently erected a five-stamp mill on its property in this district, which will soon be ready for operation. The character of the Aurora is free milling, and is said to be one of the most extensive and richest paying veins in the district. The Mellin Mining and Manufacturing Company of Berners Bay will soon erect a twenty-stamp mill on its property.

Many valuable locations have been made in the Ketchikan district, though no mills have yet been erected. It is one of the most promising mining districts on the coast, and is expected to add considerably to Alaska's gold output.

On the banks of Prince William Sound immense deposits of copper have been found, which bid fair to rival the famed Anaconda mine.

The mining carried on in the Lituya section is confined to the beach or ruby sand deposits that lie along the shore line, some miles distant above the entrance to the bay. The first discovery of gold was made there a number of years ago, since which time washing has been carried on to a greater or less extent every season. The Lituya Bay gold commands the price of \$18 per ounce. It is fine and somewhat scaly, but, being untarnished by rust, amalgamates readily, and but a very small per cent is lost in the tailings. The gold deposited along the shores is brought there by glacial action from the range back.

In conclusion, we wish to say that but a fraction of one per cent of this rich coast has ever felt the tread of the prospector, and a valuable field for operations is open to all who may come. The great success of this section of the country has inspired the breasts of capitalists with unlimited confidence in this country, and good undeveloped prospects find a ready sale. The chief virtue of prospecting on the coast of southeastern Alaska is the ability to keep in constant communication with a distributing point for supplies and the general evenness of the climate, which is not nearly as severe as the great majority of mining settlements throughout the world.

RECENT REPORTS OF STATE BUREAUS OF LABOR STATISTICS.

IOWA.

Seventh Biennial Report of the Bureau of Labor Statistics for the State of Iowa, 1895-1896. W. E. O'Brien, Commissioner. 176 pp.

Since the publication of the sixth biennial report the Iowa legislature has passed a new law governing the bureau of labor statistics and granting certain additional powers to the commissioner. The most important provision of this law makes it compulsory upon manufacturers and others employing five or more wage earners to furnish certain specified wage and industrial statistics when required by the commissioner.

The present report deals with the following subjects: Letter of transmittal, introduction, recommendations, etc., 18 pages; industrial statistics, 40 pages; strikes, 1 page; railroad statistics, 9 pages; the Amana Society, 13 pages; manual training schools, 11 pages; cooperative railroading, 2 pages; the Temple amendment, 83 pages.

INDUSTRIAL STATISTICS.—Tables are given showing by counties and industries, for the years 1895 and 1896, the number of male and female employees, the number of apprentices, the total yearly wages paid, and the number of weeks in operation for 1,752 establishments, representing 152 industries. In 1895 these establishments employed 42,472 males, 7,436 females, and 730 apprentices, making a total of 50,638. In 1896 there were employed 40,854 males, 7,732 females, and 687 apprentices, or a total of 49,273. This shows a falling off in 1896 of 1,365 persons. In the number of females employed, however, there was an increase of 296 persons in 1896.

The total amount of wages paid in these 1,752 establishments also shows a decrease. In 1895 this item amounted to \$18,119,080, and in 1896 to \$17,369,622, or a decrease of \$749,458.

The establishments were, on an average, in operation on full time and with full force 42 weeks in 1895 and 40 weeks in 1896; on short or reduced time with reduced force 5 weeks in 1895 and 8 weeks in 1896. The average time during which business was entirely suspended was 5 weeks in 1895 and 4 weeks in 1896.

The industry paying the greatest amount in wages was that of coal mining, being \$3,592,029 in 1895 and \$3,257,215 in 1896. Next in importance, as regards this item of wages, was the sash and door manufacturing industry, the wage payments for this industry being \$1,299,627 in 1895 and \$1,217,485 in 1896. The other industries whose

wage payments aggregated over half a million dollars during the year 1896 were the newspaper, printing, and binding industries, \$988,823; wholesale groceries, \$747,884; pork packing, \$688,263; and retail dry goods, \$623,030.

STRIKES.—In 1895, 40 strikes were reported to the bureau, involving 2,484 persons, and resulting in a wage loss of \$118,715. In 1896 there were but 13 strikes, involving 889 persons, and resulting in a wage loss of \$74,025. All the strikes reported a reduction in wages as the cause of strike.

RAILROAD STATISTICS.—This consists of tables showing by groups of occupations, for the years 1895 and 1896, the number of officials and other employees in the service of the railroad companies doing business in the State, and their total yearly and average daily earnings.

During 1895, 24,107 persons were employed in the railroad industry, of whom 113 were general officers. In 1896 there were 28,165 persons so employed, of whom 132 were general officers. The following statement shows the distribution of expenditures for salaries and wages of the railroad companies during the years 1895 and 1896:

EXPENDITURES OF RAILROADS FOR SALARIES AND WAGES, 1895 AND 1896.

Expended under—	1895.	1896.
General administration.....	\$595, 232. 10	\$645, 647. 86
Maintenance of way and structures	3, 216, 926. 98	3, 825, 892. 40
Maintenance of equipment.....	2, 361, 961. 80	3, 207, 647. 97
Conducting transportation	7, 580, 419. 36	8, 221, 334. 75

THE AMANA SOCIETY.—Two articles descriptive of this socialistic community are reproduced from a monthly magazine.

MANUAL TRAINING SCHOOLS.—This chapter contains reports from the superintendents of the manual training schools at West Des Moines and Mason City. They give an outline of the courses of study and systems of instruction at each school.

COOPERATIVE RAILROADING.—This contains an account of the system adopted by the Illinois Central Railroad whereby employees can acquire shares of stock in the company by making installment payments.

MASSACHUSETTS.

Twenty-seventh Annual Report of the Massachusetts Bureau of Statistics of Labor. March, 1897. Horace G. Wadlin, Chief. xv, 353 pp.

The following subjects are treated in this report: Part I, Social and industrial changes in the county of Barnstable, 104 pages; Part II, Graded weekly wages, 202 pages; Part III, Labor chronology, 1896, 47 pages.

PART I, SOCIAL AND INDUSTRIAL CHANGES IN THE COUNTY OF BARNSTABLE.—This part of the report is the result of an inquiry made

by direction of the legislature, and has special reference to the immigration of Western Islanders into the county. The presentation consists of population and industrial statistics, and portrays by comparative figures the present conditions of the county and the changes that it has undergone, and indicates the means by which improvements can be made in its resources and in the welfare of its inhabitants.

PART II, GRADED WEEKLY WAGES.—This comprehensive presentation of wage statistics for the United States and foreign countries has already been reviewed in Bulletin No. 14. It is published in installments, the present report (the second installment) containing occupations having the initial letters D, E, F, and G.

PART III, LABOR CHRONOLOGY, 1896.—This chapter contains brief accounts of important events affecting labor that occurred during the year. These accounts are arranged in chronological order under each of the three heads—hours of labor, wages, and trade unions, respectively. The chapter also contains a reproduction of the labor laws passed in 1897. The following summary will give an idea of the labor movement during the year 1896:

“In the year 1896 the labor unions continued agitation for a shorter working day, increased wages, and the use of union-made goods designated by means of the label. Considerable effort was also made in the interest of organization, unions being formed in several trades hitherto unorganized. Owing to the general curtailment of production and the necessary idleness of several thousand employees, the labor unions were particularly beneficial by paying to members a fixed sum weekly, thus supplying a means of living in place of loss of employment. The labor laws enacted by the legislature during the past year were due chiefly to the labor unions. The settlement of labor difficulties by the principle of arbitration was adhered to more strictly than in previous years. The principal subjects receiving the indorsement of organized labor were the abolition of contract labor on public works, raising of the compulsory school age, further restriction of hours of labor for women and children, the extension of factory laws to mercantile establishments. New members reported admitted to various unions numbered 1,637, a slight increase over the preceding year. New organizations formed numbered 34, with 1,454 charter members. These figures are probably less than the actual number.”

ANNUAL REPORT ON THE COOPERATIVE SAVINGS AND LOAN ASSOCIATIONS OF NEW YORK.

Annual Report of the Superintendent of Banks Relative to Cooperative Savings and Loan Associations, for the year 1896. Transmitted to the Legislature of the State of New York, March 1, 1897. F. D. Kilburn, Superintendent of Banks. 799 pp.

This report consists of: A letter of transmittal, 24 pages; a list of cooperative savings and loan associations that have reported to the banking department, or have been organized or authorized under the banking law, from 1875 to 1897, including building-lot associations, 29 pages; a detailed statement of the condition of the cooperative savings and loan associations of the State of New York, January 1, 1897, as compiled from reports to the banking department, 584 pages; a comparative table of assets, liabilities, receipts, disbursements, etc., of cooperative savings and loan associations for the year 1896, 81 pages; a detailed statement of the condition of lot associations, 22 pages; a copy of the law governing the organization and supervision of cooperative savings and loan associations, 40 pages.

The tables following give the aggregate assets and liabilities, receipts and disbursements, etc., of 349 national and local associations in the State:

ASSETS AND LIABILITIES, RECEIPTS AND DISBURSEMENTS, OF 349 SAVINGS AND LOAN ASSOCIATIONS FOR THE YEAR 1896.

Items.	National.	Local.	Total.
ASSETS.			
Loans on bond and mortgage	\$13, 858, 121	\$31, 750, 240	\$45, 608, 361
Loans on shares	444, 926	1, 029, 144	1, 474, 070
Loans on other securities	43, 632	166, 456	210, 088
Stocks and bonds	12, 000	3, 430	15, 430
Real estate	2, 195, 842	1, 935, 687	4, 131, 529
Cash on hand and in bank	663, 043	1, 169, 627	1, 832, 670
Furniture and fixtures	42, 650	41, 215	83, 865
Installments due and unpaid	275, 096	76, 811	351, 907
Interest, premium, fees, and fines due and unpaid	252, 067	135, 973	388, 040
Other assets	249, 924	144, 334	394, 258
Total	18, 037, 301	36, 452, 917	54, 490, 218
LIABILITIES.			
Due shareholders, dues and profits	14, 800, 206	32, 947, 037	47, 747, 243
Due shareholders, matured shares	600	659, 420	660, 020
Balance to be paid out on loans made	1, 158, 245	319, 338	1, 477, 583
Borrowed money	184, 277	444, 534	628, 811
Earnings undivided	1, 573, 715	2, 038, 339	3, 612, 054
Other liabilities	320, 258	44, 249	364, 507
Total	18, 037, 301	36, 452, 917	54, 490, 218

ASSETS AND LIABILITIES, RECEIPTS AND DISBURSEMENTS, OF 349 SAVINGS AND
LOAN ASSOCIATIONS FOR THE YEAR 1896—Concluded.

Items.	National.	Local.	Total.
RECEIPTS.			
Cash on hand January 1, 1896	\$564, 312	\$1, 472, 989	\$2, 037, 301
Subscriptions on shares	5, 343, 764	8, 083, 535	13, 427, 299
Money borrowed	195, 597	1, 110, 139	1, 305, 736
Mortgages redeemed	2, 616, 412	4, 618, 837	7, 235, 249
Other loans redeemed	292, 524	567, 171	859, 695
Real estate sold	328, 540	226, 765	555, 305
Fees received	141, 214	30, 910	172, 124
Premium received	414, 821	443, 563	858, 384
Interest received	661, 189	1, 635, 431	2, 296, 620
Fines received	42, 070	43, 652	85, 722
Rent received	57, 333	68, 001	125, 334
Other receipts	494, 493	233, 388	727, 881
Total	11, 152, 269	18, 534, 381	29, 686, 650
DISBURSEMENTS.			
Loaned on mortgage	4, 141, 125	6, 888, 827	11, 029, 952
Loaned on other securities	389, 710	864, 674	1, 254, 384
Paid on withdrawals, dues, and profits	3, 302, 008	7, 047, 863	10, 349, 871
Paid matured shares	374, 862	634, 227	1, 009, 089
Paid borrowed money	171, 285	921, 124	1, 092, 409
Paid interest	87, 845	44, 808	132, 653
Paid for real estate	691, 521	332, 904	1, 024, 425
Paid salaries, clerk hire, and commissions	509, 089	184, 342	693, 431
Paid advertising, printing, and postage	47, 066	23, 345	70, 411
Paid rent	42, 342	33, 627	75, 969
Paid repairs to real estate	37, 090	42, 093	79, 183
Paid taxes, insurance, etc	67, 065	81, 103	148, 168
Other disbursements	628, 218	265, 817	894, 035
Cash on hand December 31, 1896	663, 043	1, 169, 627	1, 832, 670
Total	11, 152, 269	18, 534, 381	29, 686, 650

MISCELLANEOUS STATISTICS OF 349 SAVINGS AND LOAN ASSOCIATIONS FOR THE
YEAR 1896.

Items.	National.	Local.	Total.
Associations	36	313	249
Shares in force January 1, 1896	674, 317	727, 911	1, 402, 228
Shares issued during the year	262, 681	198, 695	461, 376
Shares withdrawn during the year	214, 925	199, 147	414, 072
Shares in force December 31, 1896	722, 073	727, 459	1, 449, 532
Borrowing members	11, 856	20, 358	32, 214
Shares held by borrowing members	154, 886	212, 752	367, 638
Nonborrowing members	62, 758	74, 606	137, 364
Shares held by nonborrowing members	567, 187	514, 707	1, 081, 894
Female shareholders	a 9, 386	a 29, 319	a 38, 705
Shares held by females	a 73, 186	a 201, 672	a 274, 858
Amount of mortgages on property in the State	\$7, 375, 139	\$29, 169, 790	\$36, 544, 929
Expenses for the year	\$704, 555	\$291, 780	\$996, 338
Foreclosures in 1896	439	264	703

a Not including 17 associations not reporting.

ANNUAL REPORT ON THE BUILDING AND LOAN ASSOCIATIONS OF OHIO.

Sixth Annual Report of the Bureau of Building and Loan Associations of Ohio, for the year ending December 31, 1896. W. S. Mathews, Ex-officio Inspector of Building and Loan Associations. 516 pp.

This report contains returns of business operations and other data received from all building and loan associations in the State for the year ending December 31, 1896. Twenty-four pages are devoted to an introduction and summary, and 481 pages consist of statistical tables showing in detail for each association comparative data for 1895 and 1896, assets, liabilities, receipts, disbursements, statements of earnings, distribution of earnings, record of shares, miscellaneous statistics, date of organization and capital stock, and the names of officers and depositories.

The statement following shows the totals for all associations in the State as presented in the summary. Of the 755 associations in the State 8 were national.

ASSOCIATIONS.	
Permanent.....	708
Serial.....	19
Terminating.....	21
Serial and terminating.....	4
Total.....	755

MEMBERSHIP.	
Borrowing members.....	81, 288
Nonborrowing members.....	216, 372
Total.....	297, 660

SHARES.	
Shares of running stock in force.....	1, 215, 895
Shares of paid-up stock in force.....	173, 164
Total shares in force.....	1, 389, 059
Shares upon which loans have been made.....	410, 176

CAPITAL STOCK.	
Authorized capital stock.....	\$793, 000, 000. 00
Subscribed capital stock.....	300, 435, 571. 00
Capital stock paid in.....	80, 175, 163. 71
	431

ASSETS.

Cash on hand	\$4, 168, 583. 16
Loans on mortgage security	83, 204, 305. 27
Loans on stock or pass-book security	5, 039, 214. 38
Real estate	2, 476, 317. 49
Other	2, 018, 103. 76
Total	96, 906, 524. 06

LIABILITIES.

Running stock and dividends	57, 209, 528. 35
Paid-up stock and dividends	22, 965, 635. 36
Deposits and interest	12, 517, 570. 43
Fund for contingent losses	2, 873, 399. 86
Borrowed money	949, 705. 64
Other	390, 684. 42
Total	96, 906, 524. 06

RECEIPTS.

Cash on hand January 1, 1896	4, 691, 148. 09
Dues on running stock	21, 225, 119. 90
Paid-up stock	5, 440, 573. 08
Deposits	12, 575, 278. 49
Mortgage loans repaid	15, 508, 865. 84
Interest	4, 984, 179. 32
Premiums	1, 022, 712. 83
Fines	76, 930. 66
Pass books and initiation	68, 004. 89
Borrowed money	3, 491, 054. 34
Real estate	418, 375. 41
Other	1, 187, 210. 20
Total	70, 689, 453. 05

DISBURSEMENTS.

Loans on mortgage security	21, 055, 468. 10
Loans on stock or pass-book security	2, 706, 534. 42
Withdrawals of running stock	17, 648, 614. 04
Withdrawals of paid-up stock	3, 546, 910. 63
Withdrawals of deposits	11, 913, 048. 01
Dividends	2, 860, 364. 67
Borrowed money	3, 499, 281. 72
Interest	554, 314. 84
Other	2, 737, 645. 84
Cash on hand	4, 167, 270. 78
Total	70, 689, 453. 05

EARNINGS.

Interest	5, 021, 448. 91
Premiums	1, 025, 349. 68
Fines	78, 671. 77
Transfer fees	6, 494. 84
Pass books and initiation	61, 341. 29
Rents	73, 755. 43
Other	317, 201. 96
Total	6, 584, 263. 88

DISTRIBUTION OF EARNINGS.

Dividends on running stock.....	\$3, 021, 684. 76
Dividends on paid-up stock	1, 459, 318. 80
To fund for contingent losses.....	410, 281. 14
Interest on deposits.....	549, 745. 85
Interest on borrowed money.....	76, 810. 95
Salaries.....	428, 854. 41
Losses	115, 973. 47
Miscellaneous.....	521, 594. 50
Total.....	6, 584, 263. 88

These figures show an increase over the year 1895 of 5.31 per cent in the amount of capital stock paid in. There was likewise an increase of 6.37 per cent in the number of members, of 5.20 per cent in the amount of assets and liabilities, of 0.83 per cent in the amount of receipts and disbursements, and of 5.50 per cent in the total earnings.

ELEVENTH ANNUAL REPORT OF THE STATE BOARD OF ARBITRATION AND CONCILIATION OF MASSACHUSETTS.

Eleventh Annual Report of the State Board of Arbitration and Conciliation of Massachusetts, for the year ending December 31, 1896. Charles H. Walcott, Chairman. 204 pp.

The report proper consists of an introduction and detailed accounts of thirty cases dealt with by the board. An appendix contains a digest of laws relating to State and local boards and other tribunals of conciliation and arbitration in the United States.

During the year the board took cognizance of controversies involving persons whose yearly earnings were estimated at \$1,216,300. The work of the board has been about the average amount and of the same general nature as in former years, except that arbitration cases, as distinguished from cases of conciliation, have been relatively more numerous than heretofore. The expense of maintaining the board of arbitration and conciliation for the year has been \$11,305.86.

TENTH ANNUAL REPORT OF THE BOARD OF MEDIATION AND ARBITRATION OF NEW YORK.

Tenth Annual Report of the Board of Mediation and Arbitration of the State of New York. Transmitted to the Legislature January 28, 1897. Charles L. Phipps, William Purcell, and W. H. H. Webster, Commissioners. 589 pp.

This report, like those for preceding years, contains accounts of individual labor disputes, arranged alphabetically according to industries, and verbatim reports of proceedings of the board where sessions were held for the purpose of taking testimony. An appendix contains a reproduction of arbitration laws in the various States.

During the year ending October 31, 1896, 246 labor disputes were reported. This was nearly 40 per cent less than in 1895, and far below the average number in previous years. This decrease is attributed mainly "to the continuance of the business depression and consequent increase in the percentage of unemployed," and to some extent "to conservative action on the part of workingmen, who have learned from experience that the strike is a weapon to be used only as a last resort."

Eighteen principal cases are cited where the board exercised its power of mediation. The 246 strikes and lockouts in the State were distributed among the following occupations:

STRIKES AND LOCKOUTS IN NEW YORK, BY OCCUPATIONS, 1896.

Occupations.	Strikes or lockouts.	Occupations.	Strikes or lockouts.	Occupations.	Strikes or lockouts.
Actors	1	Fireworks makers....	1	Printing trades.....	19
Axle makers	1	Fur workers	1	Railroad employees	
Bakers	1	Furniture workers ...	2	(steam)	1
Boiler makers and ship builders.....	3	Gas-company em- ployees	1	Railroad employees	
Brass workers	1	Glass workers	1	(street)	2
Brewers	2	Grain scoopers	1	Shirt cutters.....	1
Bridge builders	1	Hat makers.....	1	Shirt makers	3
Building trades	91	Horseshoers	1	Shoemakers	5
Butchers.....	2	Ice handlers.....	2	Stonecutters.....	1
Carpet workers.....	1	Iron workers	2	Stove mounters.....	1
Cigar makers	16	Laborers	5	Tailors	12
Cigarette makers ...	1	Laundry workers....	4	Textile workers	3
Cloak makers.....	9	Machinists	4	Truckmen.....	1
Coopers	3	Mattress makers	1	Upholsterers	4
Deck hands.....	1	Messengers.....	2	Waist and wrapper makers	1
Diamond workers ...	1	Metal workers.....	2	Waiters	7
Drivers	4	Overgaiter makers....	2		
Drop forgers	1	Pavers	7		
Electric-wire men ...	1	Picture-frame makers.	1		
Express-company em- ployees	3			Total	246

Of the 246 strikes and lockouts, 153, or 62 per cent, occurred in the city of New York, Brooklyn had 26, Buffalo 21, New York and Brooklyn 9, Albany 7, Rochester 5, and the remaining 25 occurred in 20 other cities and towns throughout the State.

RECENT FOREIGN STATISTICAL PUBLICATIONS.

GREAT BRITAIN.

Ninth Report on Trade Unions in Great Britain and Ireland, 1896. Iviii, 274 pp. (Published by the Labor Department of the British Board of Trade.)

The information contained in this report on trade unions is presented under the following heads: Introduction and analysis and summary of tables; a detailed table showing, for each of 1,330 trade unions making returns, the date of formation of the union, the number of branches at the end of 1896, the membership for each of the five years 1892 to 1896, and the address of the chief office; a table showing details of funds, contributions, and expenditures for each of 100 selected trade unions in 1896; a comparative table showing the income and expenditure of the 100 unions for the five years 1892 to 1896 and another showing for the seven years 1890 to 1896 the amount of funds, contributions, and expenditures per member for the same 100 unions; also tables dealing with federations and trade councils, and mortality among trade unionists.

The number of trade unions making returns for 1896 was 1,330, with 12,807 branches and 1,487,562 members. Of the 1,330 unions, 581, with a total membership of 1,094,345, were registered under the trade union act. The remaining 749, with a total membership of 393,217, were unregistered. The bulk of the trade-union membership was furnished by a small number of large unions. Thus, there were 30 unions which had a membership of over 10,000 each and an aggregate membership of 718,050, while there were 489 unions of less than 100 members each, or an aggregate of but 24,728 members. About 83 per cent of the unions had a membership of less than 1,000, while their aggregate number of members was only 14 per cent of the total membership of all the trade unions.

A new feature of the present report is the separate statement of the number of women belonging to trade unions in each group of industries. Of the total trade unions reporting, 127 had female members with an aggregate female membership of 108,578. Of these unions, 107 had a mixed membership, and the remaining 20 unions, with a total of 6,974 persons, consisted entirely of women.

The table following shows the number and membership of trade unions, by groups of industries, for the five years 1892 to 1896.

NUMBER AND MEMBERSHIP OF TRADE UNIONS, BY GROUPS OF INDUSTRIES,
1892 TO 1896.

[For this report special inquiries were made with regard to the membership of trade unions for the five years 1892 to 1896. The result, while completely revising the figures published in previous reports, affords a much more complete and accurate comparison of trade-union membership for a period of years than has hitherto been available.]

Group of industries.	Unions making returns.					Membership of such unions.				
	1892.	1893.	1894.	1895.	1896.	1892.	1893.	1894.	1895.	1896.
Building.....	147	156	171	178	187	160, 594	175, 715	181, 077	182, 439	196, 283
Mining and quarrying	84	89	89	90	86	323, 297	327, 432	314, 412	285, 922	284, 806
Metal, engineering, and shipbuilding (a).....	267	269	271	272	281	264, 596	255, 905	260, 128	264, 991	301, 536
Textile	212	216	226	235	233	200, 085	201, 160	209, 237	211, 694	212, 491
Clothing	39	42	42	47	51	82, 086	79, 672	80, 805	77, 667	76, 800
Transportation (land and sea) ..	54	55	59	60	59	150, 996	139, 351	122, 161	119, 108	133, 774
Agricultural labor and fisheries....	9	11	11	9	7	36, 279	32, 287	7, 970	3, 535	3, 546
Printing, etc., trades	49	54	55	54	55	44, 830	46, 258	47, 745	49, 014	50, 913
Woodworking and furnishing	99	102	105	109	112	30, 516	30, 379	30, 293	31, 097	36, 141
Miscellaneous	224	245	256	262	259	168, 521	165, 533	171, 113	172, 420	191, 302
Total	1, 184	1, 239	1, 285	1, 316	1, 330	1, 461, 800	1, 453, 692	1, 424, 941	1, 397, 887	1, 487, 562

a By the term "engineering" is meant such occupations as machinists, machine builders, turners, pattern makers, etc.

It will be observed from the above table that there was a steady increase in the number of trade unions from 1,184 in 1892 to 1,330 in 1896. The trade-union membership shows a decrease from year to year until 1895, when the lowest figure, 1,397,887, was reached. In 1896 the number of members had increased to 1,487,562, the highest trade-union membership during the period.

The greatest proportional increase of membership during the five-year period occurred in the building trades, while the greatest decrease is noted in the group of agricultural labor and fisheries. Of the nine specified groups of industries given above, five show an increase and four a decrease of membership. The greatest membership in 1896, 301,506 persons, was reported by the group of metal, engineering, and shipbuilding. Next in order were the groups of mining and quarrying with 284,806, and of textiles with 212,491 members. The smallest membership was reported for the group of agricultural labor and fisheries.

The financial details of the trade unions are given for only 100 of the leading societies. These, however, in 1896, represented 65 per cent of the total trade-union membership reported.

The following comparative statement shows the financial operations of the 100 principal trade-unions for the five years 1892 to 1896:

FINANCIAL OPERATIONS OF 100 PRINCIPAL TRADE UNIONS, 1892 TO 1896.

Year.	Member-ship at end of each year.	Income.	Expendi-ture.	Funds on hand at end of year.
1892.....	913, 759	\$7, 097, 377	\$6, 914, 153	\$7, 764, 170
1893.....	917, 496	7, 916, 253	9, 043, 417	6, 637, 006
1894.....	931, 440	8, 029, 034	7, 041, 470	7, 624, 569
1895.....	921, 686	7, 659, 496	6, 852, 494	8, 431, 571
1896.....	966, 953	8, 154, 526	6, 030, 713	10, 555, 385

While the income of the trade unions was fairly stable during the five years, there was a considerable fluctuation of the annual expenditure. In all the years, except 1893, the total expenditure was less than the total income, so that the accumulated funds have correspondingly increased. The annual expenditure was greatest, £1,858,300 (\$9,043,417), in 1893 and least, £1,239,230 (\$6,030,713), in 1896.

The chief general features to be noted in a detailed comparison of expenditure over a period of years are the steady and continuous growth of expenditure on superannuation; the comparatively uniform cost per head for sickness, accident, and funeral benefits; and the marked variations in the expenditure on disputes. These points are brought out in the following comparative table:

EXPENDITURES OF 100 PRINCIPAL TRADE UNIONS ON VARIOUS BENEFITS, ETC.,
1892 TO 1896.

[The expenditure per member is calculated throughout on the basis of the total membership of the 100 principal trade unions and not on the membership of the unions paying the particular classes of benefits.]

Object.	1892.		1893.		1894.		1895.		1896.	
	Amount.	Per mem-ber.	Amount.	Per mem-ber.	Amount.	Per mem-ber.	Amount.	Per mem-ber.	Amount.	Per mem-ber.
Unemployed benefit.....	\$1, 702, 501	\$1. 87	\$2, 234, 984	\$2. 44	\$2, 254, 099	\$2. 42	\$2, 132, 573	\$2. 32	\$1, 388, 301	\$1. 43
Dispute benefit	1, 739, 224	1. 90	2, 894, 477	3. 15	772, 267	. 83	926, 645	1. 00	754, 930	. 78
Sick and accident benefit	1, 013, 356	1. 11	1, 169, 824	1. 28	1, 118, 239	1. 20	1, 284, 006	1. 39	1, 198, 804	1. 24
Superannuation benefit	496, 777	. 54	546, 274	. 59	593, 956	. 64	639, 998	. 70	690, 960	. 72
Funeral benefit	336, 266	. 37	369, 100	. 40	339, 906	. 36	370, 852	. 40	366, 910	. 38
Other benefits and grants	403, 696	. 44	600, 906	. 65	596, 482	. 64	242, 425	. 26	314, 770	. 32
Working and other expenses	1, 222, 333	1. 34	1, 227, 852	1. 34	1, 366, 421	1. 47	1, 255, 995	1. 36	1, 316, 038	1. 36
Total ..	6, 914, 153	7. 57	9, 043, 417	9. 85	7, 041, 470	7. 56	6, 852, 494	7. 43	6, 030, 713	6. 23

The expenditure for unemployed and dispute benefits reached its highest point, £1,054,035 (\$5,129,461), in 1893, since which time this kind of expenditure has almost steadily decreased. Comparing 1896 with the preceding year, it is found that there was a decrease of nearly 35 per cent in the expenditure for the unemployed, and of 18.5 per cent for dispute benefits. The other expenditures varied but slightly during the five years. In general, there was a decreasing tendency in expenditures for unemployed and dispute benefits, and an increasing tendency in expenditures for other friendly benefits. In 1896, for the first time during the period, the expenditures for sick and accident, superannuation, and funeral benefits exceeded those for disputes and for the unemployed.

In 1896 each group of industries showed a decrease in expenditure for unemployed benefits as compared with the preceding year.

Other forms of labor organization enumerated in this report are the federations and trade councils. A "federation" is defined as "an association of separate trade societies or branches of societies connected with kindred trades for certain limited and specific purposes, with limited and defined powers over its constituent societies." The trade councils are "purely local consultative bodies, to which their constituent societies send representatives for the purpose of discussion and advice."

The following summary shows the distribution of federations according to groups of industries and the trade councils for the years 1894, 1895, and 1896:

FEDERATIONS OF TRADE UNIONS AND TRADE COUNCILS, 1894 TO 1896.

Group of industries.	1894.		1895.		1896.	
	Number.	Member-ship.	Number.	Member-ship.	Number.	Member-ship.
Federations of trade unions:						
Building trades.....	35	98,337	41	98,088	43	95,191
Mining and quarrying.....	18	492,558	18	429,019	17	417,658
Metal, engineering, and ship- building	17	188,011	18	197,605	19	215,046
Textile trades	19	315,669	19	313,188	20	324,760
Other trades	21	64,189	23	79,062	31	88,663
Total	110	1,158,764	119	1,116,962	130	1,141,318
Trade councils.....	133	672,980	137	661,774	134	652,327

The aggregate membership given in the table does not represent an equal number of separate individuals, since in some cases the same union belongs to more than one federation, and it often happens that local branches of unions are affiliated to local federations for certain purposes, while for other purposes the entire union belongs to some general federation. This duplication occurs mainly in the mining and building trades.

The number of federations reported increased from 119 in 1895 to 130 in 1896, and the membership of affiliated unions and branches from 1,116,962 to 1,141,318.

ITALY.

Statistica degli Scioperi avvenuti nell'Industria e nell'Agricoltura durante l'anno 1896. Ministero di Agricoltura, Industria e Commercio, Direzione Generale della Statistica. 1898. 88 pp.

This report on strikes and lockouts in Italy during the year 1896 is published by the bureau of statistics of the Italian department of agriculture, industry, and commerce. The statistics cover disputes in the various branches of industry and among agricultural laborers.

During the year 1896 the bureau received notice of 210 strikes, in which 96,051 persons took part, or an average of 457 per strike. These figures are greater than those for any year since the beginning of the period (1879) during which strike data have been published. The

following table shows the number of strikes and strikers and the average number of strikers per strike during each year from 1879 to 1896:

STRIKES, STRIKERS, AND AVERAGE NUMBER OF STRIKERS PER STRIKE, 1879 TO 1896.

Year.	Strikes.		Strikers.		Year.	Strikes.		Strikers.	
	Total.	For which number of strikers was reported.	Total.	Average per strike.		Total.	For which number of strikers was reported.	Total.	Average per strike.
1879	32	28	4, 011	143	1888	101	99	28, 974	293
1880	27	26	5, 900	227	1889	126	125	23, 322	187
1881	44	39	8, 272	212	1890	139	133	38, 402	289
1882	47	45	5, 854	130	1891	132	128	34, 733	271
1883	73	67	12, 900	193	1892	119	117	30, 800	263
1884	81	81	23, 967	296	1893	131	127	32, 109	253
1885	89	86	34, 166	397	1894	109	104	27, 595	265
1886	96	96	16, 951	177	1895	126	126	19, 307	153
1887	69	68	25, 027	368	1896	210	210	96, 051	457

The number of strikes increased from 32 in 1879 to 139 in 1890. From that time until 1895 it remained nearly stationary, when in 1896 it increased to 210. The greatest number of strikes in 1896 occurred during the months of June, August, and October, while the smallest number took place during the winter months.

The causes of strikes during 1896 and the results are shown below:

CAUSES OF STRIKES, 1896.

Cause or object.	Strikes.		Strikers.	
	Number.	Per cent.	Number.	Per cent.
For increase of wages	111	52. 9	78, 722	82. 0
For reduction of hours	6	2. 9	980	1. 0
Against reduction of wages	26	12. 4	5, 723	5. 9
Against increase of hours	2	0. 9	267	0. 3
Other causes.....	65	30. 9	10, 359	10. 8
Total	210	100. 0	96, 051	100. 0

RESULTS OF STRIKES, 1896.

Cause or object.	Succeeded.				Succeeded partly.				Failed.			
	Strikes.		Strikers.		Strikes.		Strikers.		Strikes.		Strikers.	
	Num-ber.	Per cent.	Num-ber.	Per cent.	Num-ber.	Per cent.	Num-ber.	Per cent.	Num-ber.	Per cent.	Num-ber.	Per cent.
For increase of wages	48	43	62, 799	80	28	25	10, 424	13	35	32	5, 499	7
For reduction of hours	4	67	660	67	.....	.....	.....	.....	2	33	320	33
Against reduction of wages	9	35	1, 248	22	8	30	3, 281	57	9	35	1, 194	21
Against increase of hours	1	50	250	94	1	50	17	6	.....	.....	.....	.....
Other causes.....	17	26	2, 790	27	14	22	3, 381	33	34	52	4, 188	40
All causes	79	38	67, 747	70	51	24	17, 103	18	80	38	11, 201	12

Nearly 53 per cent of the disturbances during the year 1896 were due to demands for increased wages, while 12.4 per cent were on account of

reduction of wages, making a total of 65 per cent of the strikes which resulted from wage disputes. Nearly 4 per cent of the strikes related to hours of labor

Of the strikes, 38 per cent were successful and 24 per cent were partly successful, while 38 per cent were failures. If the number of strikers is considered, the results were still more favorable. Seventy per cent of the strikers succeeded, 18 per cent succeeded partly, and but 12 per cent failed. The most successful strikes were those relating to hours of labor.

A comparison of the proportionate results of strikes during a period of years is shown in the following table:

RESULTS OF STRIKES, 1878-1891 TO 1896.

Year.	Per cent of strikes.			Per cent of strikers.		
	Success-ful.	Partly success-ful.	Failed.	Success-ful.	Partly success-ful.	Failed.
1878-91.....	16	43	41	25	47	28
1892.....	21	29	50	29	19	52
1893.....	28	38	34	29	44	27
1894.....	34	28	38	19	24	57
1895.....	33	31	36	33	40	27
1896.....	38	24	38	70	18	12

It appears from the above table that during the period the proportion of successful strikes has increased almost steadily from year to year. With regard to the number of strikers, there is a fluctuation in the percentages of success and failure from year to year, but a comparison of results for the last three years shows a decided increase in the proportion of successful strikers.

In the next table the number of strikes, strikers, and working days lost during 1896 is shown by occupations:

STRIKES, STRIKERS, AND WORKING DAYS LOST, BY OCCUPATIONS, 1896.

Occupations.	Strikes.	Strikers.				Working days lost.
		Adults.		Children 15 years of age or under.	Total.	
		Males.	Females.			
Weavers, spinners, and carders.....	50	1, 981	6, 200	1, 525	9, 706	65, 804
Miners and ore diggers	61	22, 021	.....	8, 986	31, 007	362, 801
Mechanics.....	8	2, 149	.....	11	2, 160	4, 582
Founders	13	609	19	28	656	21, 530
Day laborers.....	9	2, 590	.....	45	2, 635	15, 162
Masons, stone cutters, and pavers	5	370	.....	10	380	3, 610
Kiln and furnace tenders	4	141	.....	2	143	671
Printers and compositors.....	5	226	.....	52	278	438
Straw plaiters and hatters.....	6	3, 521	27, 028	11, 011	41, 560	627, 997
Tanners	9	817	37	28	882	12, 834
Dyers.....	2	185	28	60	273	4, 425
Bakers and pastry cooks.....	4	1, 563	.....	.....	1, 563	4, 589
Joiners	3	122	.....	.....	122	332
Omnibus drivers and conductors.....	5	908	.....	.....	908	908
Porters and coal carriers.....	3	293	.....	.....	293	293
Shoemakers, tailors, seamstresses, etc.....	9	1, 830	335	38	2, 203	16, 163
Other occupations	14	629	617	36	1, 282	10, 364
Total	210	39, 955	34, 264	21, 832	96, 051	1, 152, 503

In 1896, as in the preceding year, the greatest number of strikes occurred in the mining and quarrying and the textile industries. The unusual number of strikers reported in 1896 is due largely to a single strike which occurred among the straw plaiters in the vicinity of Florence, and in which 40,950 persons took part. This industry, therefore, reports the greatest number of strikers during the year. Next in importance as to number of strikers were the miners and ore diggers, 31,007, and the weavers, spinners, and carders, with 9,706 strikers.

Of the 96,051 persons who participated in strikes during the year, 39,955 were men, 34,264 were women, and 21,832 were children. The large number of women and children is due to the above-mentioned strike of straw plaiters, in which 26,950 women and 11,000 children took part.

There was but one strike reported in the agricultural industry during 1896. This was among about 100 peasants employed in the vineyards near Rome. They struck for higher wages and were partly successful.

Two lockouts were reported during the year, in both of which the employers were successful. In four other cases establishments were closed on account of disputes between employers and the public authorities.

DECISIONS OF COURTS AFFECTING LABOR.

[This subject, begun in Bulletin No. 2, has been continued in successive issues. All material parts of the decisions are reproduced in the words of the courts, indicated when short by quotation marks and when long by being printed solid. In order to save space, immaterial matter, needed simply by way of explanation, is given in the words of the editorial reviser.]

DECISIONS UNDER STATUTORY LAW.

CRIMINAL CONSPIRACY—TRADE UNIONS—*People v. Davis et al.*, *Chicago Legal News*, Vol. XXX, No. 26, page 212.—The defendants were indicted for criminal conspiracy under section 46 of chapter 38 of the Revised Statutes of Illinois of 1891, and the case was heard in the criminal court of Cook County, Ill., upon a motion to quash the indictment. Section 46 of chapter 38 of the Revised Statutes reads, in so far as it is applicable to this case, as follows:

If any two or more persons conspire or agree together with the fraudulent or malicious intent wrongfully and wickedly to injure the person, character, business or employment or property of another
* * * they shall be deemed guilty of a conspiracy, and every such offender, whether as individuals, or as officers of any society or organization, and every person convicted of conspiracy at common law shall be imprisoned in the penitentiary not exceeding five years, or fined not exceeding two thousand dollars, or both.

Section 158 of chapter 38 of the Revised Statutes of 1891, the effect of which was considered by the court in its decision, reads as follows:

If any two or more persons shall combine for the purpose of depriving the owner or possessor of property of its lawful use and management, or of preventing, by threats, suggestions of danger, or any unlawful means, any person from being employed by or obtaining employment from any such owner or possessor of property, on such terms as the parties concerned may agree upon, such persons so offending shall be fined not exceeding \$500, or confined in the county jail not exceeding six months.

The decision of the court was rendered February 11, 1898, and the motion to quash the indictment was allowed. The opinion was delivered by Judge Baker, and the following, sufficiently showing the facts in the case, is quoted therefrom:

This is a motion to quash an indictment against four defendants, which is found under and intended to charge a violation of section 46 of the Criminal Code [sec. 46 of chap. 38 of the R. S. of Ill. of 1891].

The first count of the indictment charges that the defendants were members of a certain union, viz, the Hoisting Engineers' Association; that Charles and Dennis were in the employ of the Thomas Elevator Company; that the defendants did, unlawfully, etc., conspire and agree together with the fraudulent and malicious intent to wrongfully and wickedly injure the business of Charles and Dennis by unlawfully, etc.,

demanding of said elevator company the discharge of Charles and Dennis for the reason to be represented to said elevator company by the defendants; that Charles and Dennis were not members of said association, and then to "call off" certain engineers in the employ of said elevator company who were members of said association, if said demand was not complied with "for the purpose then and there of stopping the work of said Thomas Elevator Company, and thus throw said Charles and Dennis out of their employments." It then avers the execution of said agreement, demand, refusal, "calling off" of the union engineers by defendants, and avers that thereby the work of said elevator company was stopped, and by reason thereof, said Charles and Dennis discharged from their employment.

The second and third counts are identical with the first, save that the intent alleged in the second is to injure the "employment," in the third the "business and employment" of Charles and Dennis.

It is not alleged that any contract of employment for any period existed either between the elevator company and the union engineers, or between that company and Charles and Dennis.

To constitute an offense under the provisions of section 46, above quoted, there must be the agreement, with the fraudulent or malicious intent, "wrongfully and wickedly" to injure the business or employment, etc., of another. The agreement with the fraudulent or malicious intent to injure is not enough. The agreement must include the purpose to carry into execution the fraudulent and malicious intent to injure "wrongfully and wickedly," that is, by the use of wrongful and wicked means. It may be that an indictment in the words of the statute charging that the defendants did conspire and agree together with the fraudulent and malicious intent wrongfully and wickedly to injure Charles and Dennis in their employment would be sufficient, but in this indictment there is a precise statement of the means agreed upon by the defendants to be used to carry into effect their alleged malicious intent to injure Charles and Dennis in their employment; and hence, if the means so alleged to have been agreed upon are in law wrongful and wicked, the indictment well and sufficiently charges a conspiracy under the statute. And, on the other hand, if the measures so set out in the indictment are not wrongful and wicked, the indictment can not be held well and sufficiently to charge a conspiracy under the statute, for, if the means which the indictment alleges were agreed upon to be used are not wrongful and wicked, in no just sense can the indictment be held to charge a conspiracy and agreement by the defendants with the fraudulent and malicious intent, "wrongfully and wickedly" to injure Charles and Dennis.

The words "wrongfully and wickedly" in the statute are to be understood as meaning the use of things in themselves "wrongful and wicked," independently of combination. We can not say that the means are wrongful and wicked, because of the agreement to use such means to carry out a malicious intent to injure. The thing prohibited is an agreement with the malicious intent wrongfully and wickedly to injure. Whether such intent exists depends upon the means agreed upon to be used to carry out the malicious intent to injure. To say that the means agreed upon are wrongful and wicked because of the agreement to use such means to carry out the malicious intent to injure, amounts to saying that the means receive a character of wrongfulness and wickedness from the agreement to use such means in a manner which depends for its own wrongfulness and wickedness upon the means so agreed upon.

I shall not attempt to define the words "wrongfully or wickedly" as used in the statute. It is sufficient to say that in cases like this where there is no suggestion of fraud, immorality, injury to the public, or violation of contract, there must at least be a civil wrong, and invasion of the civil right of another, carrying with the liability to repair the natural and direct consequences, where injury results to the person whose rights are infringed or invaded. If the acts which the indictment alleges the defendants agreed together to do to compass the discharge of Charles and Dennis with the malicious intent to injure them constitute an actionable civil wrong, they must be regarded as wrongful and wicked in law, and if they do not amount to a civil wrong and are not criminal, they can not be regarded as wrongful and wicked in law.

The judge here cites and quotes from an English case, *Allen v. Flood*, 42 Solicitors Journal, 149, and then says:

The legal principle settled by the case is that the existence of a bad motive will not convert an act, which is not of itself illegal, into a civil wrong. The test laid down to determine what act of members of trades unions of the nature here under consideration are innocent, and what wrongful, is that if the members of a union resort to unlawful acts, they may be indicted or sued. If they do not resort to unlawful acts, they are entitled to further their interests in the manner which seems to them best and most likely to be effectual, and both are to my mind correct and salutary rules. The latter is, after all, but a restatement in different words of the rule laid down by Chief Justice Shaw, in 1842, in the case of *Commonwealth v. Hunt*, 4 Metcalf, 134, when he said: "The legality of such an association (a trades union) will therefore depend upon the means to be used for its accomplishment. If it is to be carried into effect by fair or honorable or lawful means, it is, to say the least, innocent; if by falsehood or force, it may be stamped as an illegal conspiracy." There is no suggestion, even in the indictment, that the agreement into which it is alleged the defendants entered, contemplated the use of force, falsehood, or any other act of itself unlawful, and in my opinion it follows that the acts which the indictment alleges the defendants agreed to do, the means they agreed to use, can not be held in law wrongful or wicked. The views here expressed find confirmation in the provisions of our Criminal Code, section 158 [sec. 158 of chap. 38 of the Revised Statutes of Illinois of 1891], for under well settled rules of construction it is but reasonable to infer that the legislature in adopting section 158 as a section of the act of which section 46 was another section, intended to embody in section 158 all matter in relation to interference by combination and agreement between employee and employer, between capital and industry, which it was thought proper to make the subject of a special criminal law.

Judgment is that the motion to quash the indictment must be sustained.

EMPLOYERS' LIABILITY—CONTRIBUTORY NEGLIGENCE—APPLICATION OF STATUTE—*Ashland Coal, Iron and Railway Co. v. Wallace's Administrator*, 43 *Southwestern Reporter*, page 207.—This case was originally brought in the circuit court of Boyd County, Ky., against the above-named company to recover damages for the death of one

Grant Wallace who, while in the employ thereof as a track layer, was knocked down by slate which fell from the roof of a mine and so injured him that he finally died. A judgment was rendered in favor of the administrator, and the company appealed the case to the court of appeals of the State, which rendered its decision September 25, 1897, and affirmed the judgment of the lower court. (*Ashland Coal, Iron and Railway Company v. Wallace's Administrator*, 42 Southwestern Reporter, page 744.) The company then filed a petition for a rehearing by the court of appeals and the court rendered its decision thereon November 18, 1897, and overruled the petition.

Some points not considered in the original decision were raised and decided upon the rehearing, and are shown in the following, quoted from the opinion of the court:

Appellant asks a rehearing in this case, chiefly because, in the former opinion herein, we failed to consider or construe section 2732 of the Kentucky Statutes, which provides: "Any person employed in any mine governed by this statute, who intentionally or willfully neglects or refuses to securely prop the roof of any working place under his control, or neglects or refuses to obey any order given by any superintendent of the mine in relation to the security of that part of the bank where he is at work, and whoever knowingly and willfully does any act endangering the lives or the health of the persons employed in a mine, or the security of the mines or the machinery, shall be liable to a fine of not less than ten dollars nor more than fifty dollars, to be recovered in the county in which the mine is situate." It is insisted by counsel that, as the entries and roadways of the mine were the working places of Grant Wallace, the same duty and responsibility were imposed by law upon him to see after and prop the roof of the entries as devolves upon a miner, who is actually engaged in taking out coal which is the support of the roof of the mine, to see after the security of the roof of his working place; that the positive duty rested upon Wallace, not only to test the condition of the roof of the entry, that he might report it to the mine boss, but that it was a misdemeanor on his part to begin or continue the work without first making this test to ascertain whether it was secure or not, and, if in his judgment it was not, then to refrain from work until it could be made so by props; and that his failure to do this is contributory negligence on his part, and concludes his right to maintain this suit; and in support of this contention, we are referred to the cases of *Coal Co. v. Estievenard*, 53 Ohio St., 43, 40 N. E., 725; *Coal Co. v. Muir*, 20 Colo., 320, 38 Pac., 378, and *Syndicate v. Murphy* (Ky.), 38 S. W., 700.

In all the cases referred to, the plaintiffs were engaged in actually taking coal out—in actually withdrawing the support from the roof of the mine; and in all of them they necessarily had absolute control and management of the places in which they were working, and were bound, from the nature of their employment, to look out for the security of the roof. They bear no analogy to the facts of this case. Here the mine had been operated for many years before Wallace had been employed as a track layer, and his duty was simply to lay tracks along the entries. In our opinion, the statute was specially intended to refer to those persons actually engaged as miners in taking out coal, and thereby removing the natural props of the roof, and that it has no application

to persons who are specially employed, as was Wallace in this case, to perform duties which had no connection in any way with the weakening or removal of these natural supports.

In the case of *Mining Co. v. Ingraham*, 17 C. C. A., 71, 70 Fed., 223 (a case that is in many respects analogous to this), Judge Caldwell said: "Whatever may be the duty of coal miners with reference to timbering the slopes and roofs of rooms from which they remove coal, the rule is well settled that, after a mine is once opened and timbered, it is the duty of the owner or operator to use reasonable care and diligence to see that the timbers are properly set and kept in proper condition and repair; and for this purpose it is his duty to provide a competent mining boss or foreman, to make timely inspection of the timbers, walls and roof of the mines, to the end that the miners may not be injured by defects or dangers which a competent mining boss or foreman would have discovered or removed. This is a positive duty which the master owes the servant. Neglect to perform this duty is negligence on the part of the master, and he can not escape responsibility for such negligence by pleading that he devolved the duty on a fellow-servant of the injured employee. It is an absolute duty which a master owes his servant to exercise reasonable care and diligence to provide the servant a reasonably safe place in which to work, having regard to the kind of work and the conditions under which it must necessarily be performed; and whenever the master, instead of performing this duty in person, delegates it to an officer or servant, then such officer or servant stands in the place of the master, and any servant injured by such negligence may recover from the master for such injury, regardless of the relation the injured servant sustained to the officer or servant whose negligence resulted in inflicting the injury."

The working place of the plaintiff [Wallace] in this case was a roadway which had been opened and used by all the employees of the mine for many years, and he had the right to presume that, when directed to lay the track in the entry, the master had performed his duty, and to proceed with his work relying upon this presumption, unless a reasonably prudent and intelligent man, in the performance of his work as a tracklayer, would have learned facts from which he would have apprehended danger to himself. The petition for rehearing is overruled.

EMPLOYERS' LIABILITY—FIRE ESCAPES—ASSUMPTION OF RISK—*Huda v. American Glucose Co.*, 48 *Northeastern Reporter*, page 897.—Action was brought in the State of New York by Maryanna Huda, as administratrix, against the company above named, to recover damages for the death of the intestate, who lost his life by fire in a factory belonging to said company, and of which he was an employee. The evidence showed that in the manufacture of glucose it was necessary to maintain a high temperature, and to that end the windows of the factory opening on the fire escapes were required to be kept closed, as well as all other windows therein. They were therefore kept screwed down, but the sashes were light and easily broken, and at the time of the fire were broken and many employees escaped through them and down the fire escapes. A judgment was given for the defendant com-

pany, and upon the plaintiff's appeal to the supreme court, appellate division, fourth department, this judgment was affirmed. She then appealed the case to the court of appeals of the State upon questions certified by the supreme court, which rendered its decision December 14, 1897, and affirmed the action of the lower court.

The opinion of the court was delivered by Judge Gray, and in the course thereof he used the following language:

These facts are sufficient to inform us of the situation, and to enable us to consider the questions certified. They are: "(1) Whether the defendant's method of screwing down the windows of the building in which the deceased was employed, so that there was no access to the fire escapes except by breaking the windows, and forbidding the employees of the defendant engaged in that building from opening the windows, and requiring them to keep a high temperature in the work rooms, was a violation of the statute requiring a construction and maintenance of fire escapes on such buildings. * * * (3) whether the deceased, who was familiar with the defendant's methods as stated in the first question, and for a long period had worked under and acquiesced in the conditions stated in the first question, assumed the risks of the situation; and whether, by reason thereof, the plaintiff is not entitled to recover in this action."

The statute referred to in the first question (Laws 1892, chap. 673, sec. 6) provided for the manner of construction of fire escapes upon factory buildings, and that they should have landings or balconies of a certain size, "embracing at least two windows at each story, and connecting with the interior by easily accessible and unobstructed openings." The answer to the first question turns upon the propriety of the resort by the defendant to the methods adopted to keep the temperature of its factory sufficiently high and uniform. That such conditions were necessary is the fact assumed by the question, and it is conclusive here. Obviously, for their maintenance, the windows had to remain closed, and the duty of the defendant to its employees, in the face of that necessity, was not to interpose between them and the means of escape such a barrier in the description of windows constructed as would prevent a ready passage through them. The proof as to these windows is that they were so light in frame as to offer but the slightest difficulty in breaking through, if the time was wanting to unscrew them. The interior of the factory was connected with each balcony upon the fire escape through windows easily accessible by an unobstructed passage, and the requirement of the statute was thus met. If the windows, as "openings," were readily approached from the interior, and could be passed through, it can not be said that the necessity of having to break them, which the testimony showed was easily done, constituted any greater obstruction than would have been the necessity of uncatching and of lifting them. The reading of the provisions of the statute, upon the subject of fire escapes in factories must be reasonable, and in view of the demands of the case. The construction of the fire escapes must be as prescribed for the outside of the factory building, and, unquestionably, that part of the law which requires a connection to exist with the interior is not to be slighted. But it would be wholly unreasonable to interpret the law as requiring a condition as to the openings upon the fire escapes which the successful prosecution of the business would forbid. There had to be a closed window during the manufacturing process, and, whether it was composed of one sash, or of two

sashes fastened together, was immaterial, so long as it was readily removable by breaking through, and a ready access to and through it was preserved. The evidence shows that there was no serious obstruction at all to a passage to and through the windows. The first question certified is answered, therefore, in the negative.

In considering the third question certified, I think, with the assumption of facts to which the formulation of the question compels us, that but the one answer is possible, and that is that the deceased assumed the risks of the situation. An employee is very reasonably regarded as assuming those risks in his employment which are obvious as well as ordinary. If the master has done all that his duty demanded of him with respect to securing the safety of his workmen, as to the place where they have been set to work, and as to the tools and appliances with which that work was to be done, he will not be liable for a personal injury occurring by reason of a risk which is incidental to the business itself, or which results from the dangers of the environment into which the workman knowingly entered, under proper instructions. The judgment appealed from must be affirmed.

EMPLOYERS' LIABILITY—GUARDS FOR MACHINERY—*Klatt v. N. C. Foster Lumber Co.*, 73 *Northwestern Reporter*, page 563.—Action was brought in the circuit court of La Crosse County, Wis., by William Klatt against the above-named company to recover damages for injuries received while in its employ. He was working near several chains running parallel with each other along the surface of the floor with his feet close to a sprocket wheel that projected above the floor, and there was no protection to prevent his feet from getting into the wheel and chains. His foot slipped on the floor and was caught by the chain and hooks thereon and severely injured, the toes and a part of the foot being torn off. A judgment was rendered for the plaintiff and the defendant company appealed the case to the supreme court of the State, which rendered its decision December 10, 1897, and affirmed the judgment of the lower court.

Among other points made by the plaintiff, he claimed that the company was responsible in damages for failing to properly guard the machinery as required by a statute of the State, and on this point the supreme court, in its opinion delivered by Judge Marshall, held as follows:

Error is assigned on the refusal of the court to instruct the jury as follows: "You can not find that the defendant was negligent merely because of its failure to provide a partition, guard, contrivance or appliance between the sprocket wheel and chain, on which plaintiff was injured, and the place where he worked." We are unable to say that error was committed by the ruling referred to. It is not clear from the evidence that ordinary care, under the circumstances, did not require some protection to guard against the danger of employees, circumstanced as plaintiff was, getting their feet caught in the chain and sprocket wheel. So we can not say, as a matter of law, that the omission of such guard was not negligence. The statute of this State [sec.

1636f, Annotated Statutes of 1889] requires all gearing so located as to be dangerous to employees when engaged in their ordinary duties, to be securely guarded so as to be safe to such employees in such employment. If the sprocket wheel was so located as to be dangerous to plaintiff while engaged in his ordinary duties, unless guarded in some proper way, then the statute applies and the absence of the guard was negligence *per se*. This court has distinctly held that when the law requires some particular thing to be done by a person to guard the personal safety of others, a failure to perform the duty so imposed constitutes actionable negligence at the suit of a person of that class, injured by such failure of duty, without contributory negligence on his part. The fact that a penalty is imposed, by the law requiring the performance of the duty, for noncompliance therewith, makes no difference, unless the penalty be expressly given to the party injured in satisfaction of such injury. In Wharton on Negligence (section 443) the rule is stated thus: "Where a statute requires an act to be done or abstained from, by one person for the benefit of another, then an action lies in the latter's favor, against the former, for neglect of such act or abstinence, even though the statute gives no special remedy. The imposition of a penalty by the statute does not take the place of the remedy by suit for negligence, unless the penalty be given to the party injured in satisfaction for the injury."

EMPLOYERS' LIABILITY — RAILROAD COMPANIES — APPLICATION OF SPEED ORDINANCE TO EMPLOYEES — *East St. Louis Connecting Ry. Co. v. Eggman*, 48 *Northeastern Reporter*, page 981.—This was an action on the case brought by E. J. Eggman, as administrator of the estate of Joseph T. Newland, deceased, against the above-named railway company, for negligently causing the death of his intestate. Upon trial in the city court of East St. Louis, Ill., the plaintiff recovered a judgment for \$3,500. On appeal to the appellate court of the fourth district the judgment was affirmed, and the railway then appealed to the supreme court of the State, which rendered its decision December 22, 1897, and affirmed the judgment of the lower courts.

The facts in the case and an interesting point of the decision are given in that part of the opinion of the supreme court which is quoted below:

The declaration charges that, while the deceased was in defendant's employ as a carpenter, constructing a drain near or under defendant's track, on the bank of the Mississippi River, in East St. Louis, the defendant's employees in charge of one of its engines attached to freight cars, negligently and carelessly ran the same upon him, thereby so injuring him that he died. It is charged that he was not a fellow-servant with those in charge of the engine, and that he was in the exercise of due care for his own safety. The negligent acts charged against the servants controlling the engine are that it was being run at a rate of speed exceeding six miles per hour, contrary to an ordinance of the city of East St. Louis, and that, in violation of a like ordinance, it was being run without ringing a bell upon the same; these acts of

negligence being within the city limits of the city of East St. Louis, and causing the alleged injury. We shall only notice a few of the points urged here for a reversal.

The first of these, in natural order, is that the declaration states no cause of action, and therefore the trial court erred in overruling the defendant's motion in arrest of judgment. The ground of this position is that the ordinance which the defendant is charged in the declaration with having violated was only intended to protect the public against the danger of moving trains and locomotives at public places, and could have no legal application, as between the railroad company and its employees, to locomotives being run in the company's private grounds. This same question was presented for decision in *Railroad Co. v. Gilbert*, 157 Ill., 354, 41 N. E., 724, and decided adversely to the contention here urged. That case was cited and followed in *Railroad Co. v. Eggman*, 161 Ill., 155, 43 N. E., 620. We have given due consideration to the argument urging the overruling of these decisions, but find no sufficient reason for so doing. The power of the municipality to pass the ordinance as reasonably tending to protect persons against injury is not seriously questioned, and we can see no good reason for holding that a person should be deprived of that protection merely because he is at the time an employee of the company, working in its yards or other private grounds.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—CONSTRUCTION OF STATUTE—*Keatley v. Illinois Central R. R. Co.*, 72 *Northwestern Reporter*, page 545.—This action was brought in the district court of Dubuque County, Iowa, by the administrator of Robert Keatley, deceased, to recover damages for his death from the railroad company above named. Robert Keatley was a member of a "stone gang" employed by the company in building a retaining wall near one end of an iron bridge which was being built at the same time by an "iron gang" employed by the company. Trains were allowed to run over this bridge, although not fully completed, and the foreman of the "iron gang" had control over the speed of the trains and signaled them at what speed to go upon and over the bridge. At the time of the accident a freight train came upon the bridge, and the engine and ten cars passed over it. The next two cars were derailed, but passed over the bridge on the ties, and as they came opposite a derrick platform, where the deceased was engaged, one of them rolled off the trestle and, falling on said platform, killed the deceased. The bridge went down with the remainder of the train. It was alleged by the plaintiff that this accident was caused by the negligence of the foreman of the "iron gang" in allowing the train to go upon the bridge at too great a rate of speed. A judgment was rendered for the plaintiff, and the defendant company appealed the case to the supreme court of the State, which rendered its decision October 18, 1897, and affirmed the judgment of the lower court.

From the opinion of the court, which was delivered by Chief Justice Kinne, the following, showing the main points of the decision, is quoted:

This is the second appeal in this case. The opinion in the former hearing will be found in 63 N. W., 560. Much is said in argument by the appellant to the effect that this boy Robert Keatley and his stone gang and the iron gang were fellow-servants, and that, in the absence of the statute (sec. 1307 of the Code of 1873), there could be no liability under the established facts. It is then insisted that the facts do not bring the case within the provisions of the statute. Appellant's contention is that the negligence of the foreman of the iron gang was not the negligence of one engaged in the operation of the road, within the meaning of the statute, and that decedent was not injured by reason of the negligent operation of the road. On the former appeal this language was used in the opinion: "Applying the facts attending the employment of the deceased to the statute, we think that if he was not out of the line of his duty in standing on the derrick platform, and the employees of the defendant negligently ran the train at a dangerous rate of speed, upon an unfinished and insecure and unsafe bridge, by reason of which the cars left the track, and caused the death of the deceased, he was within the statute, and a right of action accrued." Counsel now insists that plaintiff can not recover unless it appears that the injury complained of was caused by or through the negligence of the employees who were running or operating the train, and, as the trial court instructed the jury that said employees were not negligent, there can be no recovery under the statute. The language of the former opinion is to be construed with reference to what was said before the court and the issues as then made. It was then said that no charge of negligence on the part of employees for failing to put out a flag or other sign to stop the train was made in the petition. The case is now before us on allegations of negligence not made before; and, in view of this situation, there is nothing in the former opinion justifying the claim counsel now makes for it as applicable to the facts now before us. The statute of 1873 (Code, sec. 1307) is as follows: "Every corporation operating a railway shall be liable for all damages sustained by any person, including employees of such corporation, in consequence of the neglect of agents, or by any mismanagement of the engineers or other employees of the corporation, and in consequence of the willful wrongs whether of commission or omission of such agents, engineers, or other employees, when such wrongs are in any manner connected with the use and operation of any railway, on or about which they shall be employed, and no contract which restricts such liability shall be legal or binding."

On the former appeal we held that the employment of the decedent placed him within the protection of this statute. (*Keatley v. Railroad Co.*, supra.) - Upon the record now before us, the facts touching his employment are the same as they appeared upon the former trial. We discover no reason for not adhering to our former holding in that respect.

In determining whether the accident resulted from the negligent operation of the train, it is not necessary, as counsel argue, that such negligence must be the act or failure to act of employees who are actually on the train. A train may be controlled by those upon it, or it may be controlled by one not on it, by signals given to those operating the train. It can make no difference, as to the right of recovery, whether the negligence, if any, which resulted in causing the accident, was the act or failure to act of one of the trainmen, or of some other

man in the defendant's employ, and who was charged with the duty of controlling the movements of the train by flag signal or otherwise. The foreman of the iron gang had control over the speed of trains across this bridge, and if he failed to signal the engineer of the train, and as a result it moved across the bridge at a dangerous rate of speed, thereby killing the decedent, the negligence was that of one charged with responsibility with respect to the movement of the train. Suppose this foreman of the iron gang had signaled the engineer to go slow across the bridge, and the engineer disobeyed the signal, would any one question the liability of the company if such disobedience resulted in Keatley's death? Surely not. There can be no doubt, then, of liability when another employee (foreman of the iron gang), who is charged with a duty with reference to the moving train, fails to perform it, and as a result a man is killed. (*Pierce v. Railway Co.*, 73 Iowa, 140, 34 N. W., 783; *Doyle v. Railway Co.*, 77 Iowa, 608, 42 N. W., 555.) Counsel is in error when he says: "In the case at bar there was no negligence in the operation of the railroad by any one engaged in its operation." The foreman of the iron gang, while not an operative upon the train, engaged in the physical labor of controlling its movements, was at the bridge, furnished with a slow flag, charged with the control of the operation of the train over that uncompleted structure, and to that extent it was his duty to control the operation of the train, by giving the proper signal to slow up the train in case the condition of the bridge required it. If he neglected that duty, he neglected a duty touching the operation of the road, because, so far as the duty enjoined upon him to signal the train was concerned, he was as much engaged in operating the road, within the meaning of the statute, as the engineer on the train.

EMPLOYERS' LIABILITY ACT—CONSTRUCTION OF STATUTE—VICE PRINCIPALS—*Baltimore and Ohio Southwestern Ry. Co. v. Little*, 48 *Northeastern Reporter*, page 862.—This action was brought in the circuit court of Pike County, Ind., by Mary F. Little, administratrix, to recover damages for the death of one John F. Little, a locomotive engineer in the employ of the above-named railway company. The death of Little was caused by a collision with a freight train which had been placed upon a siding where it was standing when the collision occurred. The head brakeman of the freight train had unlocked the switch to let his train go upon the siding and had then left the switch open, so that the train of which Little was engineer ran onto the same siding with the freight train instead of passing by on the main track as was intended. It was upon the negligence of this head brakeman that the administratrix based her claim. The decision of the district court was in her favor, and the railway company appealed the case to the supreme court of the State, which rendered its decision December 17, 1897, and reversed the decision of the lower court.

The opinion of the supreme court, which was delivered by Judge Hackney, reads in part as follows:

The limits of our inquiries have been narrowed somewhat by the following concessions of counsel for the appellee [Mary F. Little]: "At

the very threshold of our argument, we feel called upon to concede, which we do frankly, that our cause would be untenable, under our Indiana decisions, but for the 'Employers' Liability Act,' of March 4, 1893;" and "we concede again that we must ground our claim for an affirmation of the judgment on subdivisions numbered 3 and 4 of section 1 of that act." This concession, which is undoubtedly correct, would, in the absence of the provisions of the act mentioned, defeat the appellee's recovery upon the rule that the head brakeman, whose negligence caused the collision and the death of Little, was a fellow-servant of Little as to the act negligently omitted. It remains, therefore, to determine whether the paragraph of complaint in question stated a cause of action, freed, by the act mentioned, from the fellow-servant rule.

The third and fourth subdivisions of section 1 of the act of March 4, 1893 (Acts 1893, p. 294; Rev. St. 1894, sec. 7083), are as follows, our figures separating them into specifications of exemption from the fellow-servant rule: (1) "Third. Where such injury resulted from the act or omission of any person done or made in obedience to any rule, regulation or by-law of such corporation [any railroad or other corporation except municipal], or" (2) "in obedience to the particular instructions given by any person delegated with the authority of the corporation in that behalf." (3) "Fourth. Where such injury was caused by the negligence of any person, in the service of such corporation, who has charge of any signal, telegraph office, switch yard, shop, round-house, locomotive engine or train upon a railway, or" (4) "where such injury was caused by the negligence of any person, coemployee, or fellow-servant engaged in the same common service, in any of the several departments of service of any such corporation, the said person, coemployee, or fellow-servant at the time acting in the place and performing the duty of the corporation in that behalf, and the person so injured, obeying or conforming to the order of some superior, at the time of such injury having authority to direct; but nothing herein contained shall be construed to abridge the liability of the corporation under existing law."

The gist of the cause of action alleged, as we have seen, was in the omission of a duty, which duty was required by rule of the appellant corporation. The complaint did not allege that the omission by the brakeman was in obedience to a rule. It is plain, therefore, that the case does not fall within the first of the above specifications of the act. The appellee's construction of this specification is that if any duty is enjoined by rule, etc., upon a servant, and the duty is omitted or neglected, the corporation is liable for resulting injury. If this was the proper construction of the specification, there would be little requirement for other provisions of the act than those of the third subdivision, since it would strike down the fellow-servant rule in its entirety wherever the act or omission is in the line of duty. It would make the corporation liable for the act or omission of a servant, whether negligent or not, and whether the duty negligently performed or negligently omitted may have been enjoined by the general rules, etc., of the corporation, or is in obedience to particular instructions from one "delegated with authority in that behalf." Such was not the intention of the legislature. On the contrary, we think there can be no doubt that it was intended by the third subdivision to make corporations liable where the servant does an act or omits action in obedience to the command of the corporation given by rule, regulation, or by-law, or through any person delegated with authority from the corporation to make the command. This

construction not only arises from the unambiguous language of the subdivision, but is supported by the general character of the act and the provisions of subdivision fourth.

The fourth subdivision relates to the negligence of servants, and not, as with the third subdivision, to acts or omissions done or made by order of the company or some one in command. The specification which we have numbered 3 describes a class of servants for whose negligence corporations are made liable, and they are servants most of whom, if not all, have heretofore been held not to perform a duty which the master owed to other servants in the same general line of the common service, and therefore fellow-servants. In other words, this specification but enlarged the class of vice principals as it had before existed. Does the negligent omission at the foundation of the cause of action here pleaded appear from the pleading to have been by any of the vice principals so described? The only allegation of the complaint is that the omitted duty was by a brakeman, and we find that brakemen are not named in the law among the vice principals therein so described. But, in order to support the complaint, counsel for the appellee insist that the legislature did not intend to use the phrase "switch yard," but intended to separate the two words with a comma. With this change of punctuation, they would add to the number of vice principals one in "charge of any * * * switch," and then, from the duty to open and close the switch when he admitted his train to the side track, argue that the brakeman was in "charge" of the switch at the time he neglected to close it. This position is supported by the insistence that there is not, in railroading parlance, any such term as "switch yard," and that the lexicographers recognize no such term. In the statute the word "yard" is employed in connection with and as descriptive of railway service, and, as said in *Harley v. Railroad Co.*, 57 Fed., 144, "the court may know, from its general knowledge of the methods and appliances of railroad companies, * * * 'the yard' consists of side tracks upon either side of the main track, and adjacent to some principal station or depot grounds, where cars are placed for deposit, and where arriving trains are separated and departing trains made up. It is the place where such switching is done as is essential to the proper placing of cars either for deposit or for departure." "Railroad yard" and "switch yard," we have no doubt are synonymous, and the latter term was used in the act under consideration as descriptive of the former. Accepting our construction of the third specification, there is no place for the contention of appellee's learned counsel that the temporary use of the switch by the brakeman placed him in "charge" of it, within the meaning of the act. Judgment reversed.

LABELS OF LABORERS' UNIONS—INJUNCTION TO PREVENT FRAUDULENT USE OF SAME, ETC.—*Tracy v. Banker*, 49 *Northeastern Reporter*, page 308.—This was a bill in equity brought in the supreme judicial court of Massachusetts by Thomas F. Tracy, as vice president of the Cigar Makers' International Union of America, a voluntary association, to prevent the defendant from fraudulently using the association's trade-union label, or counterfeits thereof. The decision of the court was rendered February 8, 1898, and a decree for the plaintiff was issued. The decision was based largely upon the construction of

chapter 462 of the acts of 1895, and especially of section 3 thereof. The statute provides for the adoption of labels, trade-marks, etc., by individuals, associations, or unions, and section 3 thereof reads as follows:

SEC. 3. The owner of any such label, trade-mark, stamp or form of advertisement recorded as provided in section 1 of this act, may proceed by suit to enjoin the manufacture, use or sale of any such counterfeits or imitations, and all courts having jurisdiction thereof shall grant injunctions to restrain such manufacture, use or sale, and shall award the complainant in such suit such damages resulting from such wrongful manufacture, use or sale as may by said court be deemed just and reasonable, and shall require the defendant to pay to such person, association or union the profits derived from such wrongful manufacture, use or sale; and such court may also order that all such counterfeits or imitations in the possession or under the control of any defendant in such case be delivered to an officer of the court, or to the complainant to be destroyed. In all cases where such association or union is not incorporated, suits under this act may be commenced and prosecuted by an officer of such association or union, on behalf of and for the use of such association or union, and every member of such association or union shall be liable for costs in any such proceedings.

The opinion of the court was delivered by Judge Holmes and reads, practically in full, as follows:

The defenses requiring notice are that the statute protects only merchants or manufacturers, that the association is not of a kind that will be protected by the court, and laches.

The label is a part of the well-known machinery of trade unions, and the use of it is found, if a finding be necessary, to be of value to the union and its members. It would not be traveling too far from the record, perhaps, if we should assume that the use of the label is in fact, as certainly it might be, of far more economic importance to the union than are many or most of the trade-marks, strictly so called, which are protected by the courts. Nevertheless, technical difficulties, which would have been hard to escape from without some subtlety or a statute, prevented the plaintiff from recovering in a case like this. (See *State v. Bishop*, 128 Mo., 373, 381, 31 S.W., 9.) That was in 1890. Just before the argument of that case there was an attempt at legislation on the subject. (St., 1890, chap. 104.) Three years later a statute was passed which certainly looks as if it had been intended, in part, to meet that decision. (St., 1893, chap. 443.) But this act was still somewhat under the influence of the notion that protection of the label was a protection of manufacture; and after an amendment by St., 1894, chap. 285, it was repealed by the act of 1895, which is still in force. It is true that the present statute is entitled "An act to protect manufacturers from the use of counterfeit labels and stamps." But we can see no sufficient room for doubt that it protects the plaintiff. The first section extends to "any person, association or union." That unincorporated associations or unions were contemplated is shown by section 3, already referred to, which allows suits to be prosecuted by the officers of such associations or unions. It is impossible to believe that, when the statute mentions unincorporated unions, it does not refer to trade unions. It authorizes such unions to adopt, as well as to record, a label. Therefore it creates a right, if the court is unable to recognize one without its aid. If it applies to trade unions, it must be taken to apply to them as they ordinarily are; that is, as associations of work-

men, not as manufacturers or venders of goods. It contemplates that the labels will be applied to merchandise, as of course they must be, and as these labels are. But it carefully abstains from using a word which implies that the protection or wrongful use of labels is confined to manufacturers or venders. The policy of the statute is shown by the above-cited amendment of 1894 to the earlier act, which had for its object to extend the liability to others besides manufacturers.

If, as we think, the statute expressly creates or recognizes the right of trade unions to be protected in the use of labels for trade-union purposes, the suggestion that the association represented by the plaintiff is an unlawful association falls of itself. It is too late to make such a contention as to trade unions generally, even apart from the statute under which this suit is brought. But the general purposes of this union are similar, so far as we know, to the general purposes of other unions. The constitution, as a whole, is not illegal; and the association is not deprived of the protection of the law, for what otherwise would be its rights, if in some incident or particular the purposes which it expresses are unlawful—which we do not imply.

The plaintiff's association had a label registered under the earlier statute of 1893. The defendant has the boldness to urge that because he began his attempt to defraud the union in 1894, before the act of 1895 was passed, after having been permitted on his application to use the label for a time, therefore the plaintiff's union has no rights under the statute. We do not think the suggestion needs more than a statement.

The plaintiff has lost no rights through laches.

Finally, as the plaintiff makes out his right, it is to be protected against one form of swindling as well as another—against the use of real labels in a fraudulent way, as well as against the use of counterfeits—if, indeed, the real labels, as used by the defendant after mutilation, are not counterfeits, within the statute. Decree for plaintiff.

MASTER AND SERVANT — WAGES — FORFEITURE — *Cote v. Bates Manufacturing Co.*, 39 *Atlantic Reporter*, page 280.—This was an action brought by Pierre Cote against the above-named company in the supreme judicial court of Maine to recover \$7.14, wages due, and a like amount as a forfeiture under section 4 of chapter 139 of the acts of 1887, which reads as follows:

It shall be lawful for any person, firm or corporation engaged in any manufacturing or mechanical business, to contract with adult or minor employees to give one week's notice of intention on such employee's part, to quit such employment under a penalty of forfeiture of one week's wages. In such case, the employer shall be required to give a like notice of intention to discharge the employee; and on failure, shall pay to such employee a sum equal to one week's wages. No such forfeiture shall be enforced when the leaving or discharge of the employee is for a reasonable cause. *Provided, however,* The enforcement of the penalty aforesaid shall not prevent either party from recovering damages for a breach of the contract of hire.

The court rendered its decision December 10, 1897, and gave judg-

ment for the plaintiff for the wages claimed but not for the forfeiture. The opinion of the court, delivered by Judge Strout, reads as follows:

Plaintiff was a weaver in defendant's mill, receiving 50 cents per cut. His contract, which was in writing, provided that he should give one week's notice of his intention to quit, and work that week, and that, if he quit without giving such notice and working, he should forfeit one week's wages. The statute imposes a like forfeiture by a corporation for the discharge of its laborer, without one week's notice of its intention. On Saturday, May 16, 1896, defendant owed plaintiff for two weeks' work, amounting to \$14.28. On May 11th defendant gave notice of a reduction in pay of weavers to 48 cents per cut, to take effect on Monday, May 18th. Plaintiff says he first knew of this May 16th. On Monday, May 18th, plaintiff went into the mill, but did not start his loom, and he, with others, refused to work at the reduced rate, and left. He says he was willing to work his notice at the old price, but understood that, if he worked longer, he would only be paid at the reduced rate. He was not told that if he gave notice, and worked the week, he would receive the old price. He went back on the following Wednesday, and worked one week, for which he was paid at the rate of 48 cents per cut, and was also paid \$7.14, for one week's work previously done, the company retaining an equal amount as forfeited, on the ground that he left without giving the required notice.

This action is brought to recover the amount withheld, and also a like amount as forfeiture under the statute, for discharging him without notice. The case fails to show legal ground for recovery of forfeiture, as defendant did not attempt to discharge plaintiff.

As to the week's unpaid wages, whatever might have been the legal right of plaintiff to recover at the old rate, if he had given notice on the 18th and worked his week, the plaintiff had good reason to suppose that he would not be so paid, and was therefore justified in leaving. If defendant intended to pay 50 cents per cut, for the time of the week's notice, it could very easily have so informed the plaintiff. But failing in this, and the reply of the superintendent to a remonstrance of the weavers, that the old price would not be restored, fairly gave the weavers to understand that only 48 cents per cut would be paid after May 18th. Acting upon this inference, warranted by all the circumstances, the plaintiff was justified in leaving, and incurred no forfeiture thereby. He is entitled to recover the week's wages withheld. Judgment for the plaintiff for \$7.14, and interest from date of writ.

MECHANICS' LIENS—APPLICATION OF STATUTE—*Koken Iron Works v. Robberson Avenue Railway Co.*, 44 *Southwestern Reporter*, page 269.—This was an action to enforce a mechanic's lien brought up on writ of error from the circuit court of Greene County, Mo., where a judgment had been rendered for the plaintiff, to the supreme court of the State. Said court rendered its decision November 3, 1897, and affirmed the judgment of the lower court.

The decision involved but one point of much interest, which is clearly stated in so much of the opinion of the supreme court, delivered by Chief Justice Barclay, as is quoted below:

Counsel for the railway company insists that street railroads are not

within the intent of the law giving a lien upon the "roadbed, station houses, depots, bridges, rolling stock, real estate and improvements" of "any railroad company" for which work or labor is done, as defined by the statute (2 Rev. St., 1889, sec. 6741). Undoubtedly, much of the language of that law is applicable to railroads operated by steam. Those were the roads to which the acts were chiefly designed to apply. But the general terms of the law are also susceptible of application to street railroads, and we find nothing in any part of the enactment to indicate that such application is not intended. When we bring into view the various statutes affording liens for materials or labor furnished for the improvement of land, and consider the broad objects sought by such legislation, it seems clear that street railroads were not intended to be exempt from liability to respond to such lien claims in a proper case. Laws of this nature should receive a fair and rational interpretation, and full effect be given to the remedial purpose that constitutes their spirit.

WEEKLY PAYMENT OF WAGES—CONSTRUCTION OF STATUTE—*Commonwealth v. Dunn*, 49 *Northeastern Reporter*, page 110.—This was an action by the State against John A. Dunn for a violation of the statute in relation to the weekly payment of wages brought in the superior court of Worcester County, Mass. Said case turned largely upon the construction of sections 51, 65, and 78 of chapter 508 of the acts of 1894 and section 1 of chapter 438 of the acts of 1895, which read as follows:

SEC. 51. Every manufacturing, mining or quarrying, mercantile, railroad, street railway, telegraph and telephone corporation, every incorporated express company and water company shall pay weekly each employee engaged in its business the wages earned by such employee to within six days of the date of said payment; and every city shall so pay every employee engaged in its business, unless such employee shall request in writing to be paid in some different manner; and every municipal corporation not a city and every county shall so pay every employee in its business if so required by him; but if at any time of payment any employee shall be absent from his regular place of labor he shall be paid thereafter on demand. The provisions of this section shall not apply to any employee of a cooperative corporation or association who is a stockholder therein, unless such employee shall request such corporation to pay him weekly. The railroad commissioners after a hearing, may exempt any railroad corporation from paying weekly any of its employees who, in the opinion of the commissioners, prefer less frequent payments, and when the interests of the public and such employees will not suffer thereby.

SEC. 65. Any corporation violating the provisions of section fifty-one of this act, requiring the weekly payment of wages, shall be punished by a fine not exceeding fifty dollars and not less than ten dollars.

SEC. 78. Any person violating any provision of this act where no special provision as to the penalty for such violation is made shall be punished by fine not exceeding one hundred dollars.

SEC. 1. Sections fifty-one to fifty-four, inclusive, of chapter five hundred and eight of the acts of the year eighteen hundred and ninety-four, relative to the weekly payment of wages by corporations, shall

apply to any person or partnership engaged in this Commonwealth in any manufacturing business and having more than twenty-five employees. And the word "corporation," as used in said sections, shall include such persons and partnerships.

The defendant, Dunn, was convicted and carried the case to the supreme judicial court of the State on exceptions. Said court rendered its decision January 8, 1898, and sustained the exceptions. Chief Justice Field delivered the opinion of the court, and the following is quoted therefrom:

We are of opinion that the effect of St., 1895, chap. 438, is to make persons and partnerships engaged in any manufacturing business in the Commonwealth, and having more than 25 employees, subject to the general provisions of St., 1894, chap. 508, sec. 51, concerning manufacturing corporations; but that the special provisions of that section concerning municipal corporations not cities, and concerning counties, cooperative corporations or associations, and railroad corporations are not applicable to such persons and partnerships. As the word "corporations," found in section 65 of the statute of 1894, can not be held to include the persons and partnerships mentioned in the statute of 1895, we are of opinion that section 78 of the statute of 1894 is applicable to such persons and partnerships. After the passage of the statute of 1895, section 51 of the statute of 1894 is to be read as if the statute of 1895 had been incorporated in it.

DECISIONS UNDER COMMON LAW.

CONSPIRACY—BOYCOTTS—*Hopkins et al. v. Oxley Stave Co.*, 83 *Federal Reporter*, page 912.—This case was brought before the United States circuit court of appeals, eighth circuit, on appeal from the United States circuit court for the district of Kansas. (See *Oxley Stave Co. v. Coopers' International Union of North America et al.*, 72 *Federal Reporter*, page 695, and *Bulletin of the Department of Labor*, No. 7, page 783.) A bill for an injunction was asked by the Oxley Stave Company against Lodge No. 18 of the above-named union, the Trades Assembly of Kansas City, Kans., and a number of the individual members of such organizations. As against the organizations the bill was dismissed, and a temporary injunction was granted against the remaining defendants, from which they appealed. The circuit court of appeals rendered its decision November 8, 1897, and, by a divided court, sustained the decision of the circuit court.

The opinion of the court was delivered by Circuit Judge Thayer and contains a full statement of the facts in the case. A strong dissenting opinion was delivered by Circuit Judge Caldwell. Both of these opinions are given below in full:

THAYER, Circuit Judge. This case comes on appeal from an order made by the circuit court of the United States for the district of Kansas, granting an interlocutory injunction. The motion for the injunction was heard on the bill and supporting affidavits, and on certain opposing affidavits. There is no substantial controversy with reference to the material facts disclosed by the bill and accompanying affidavits,

which may be summarized as follows: The appellants, H. C. Hopkins and others, who were the defendants below, are members of two voluntary, unincorporated associations, termed, respectively, the Coopers' International Union of North America, Lodge No. 18, of Kansas City, Kan., and the Trades Assembly of Kansas City, Kan. The first of these associations is a labor organization composed of coopers, which has local lodges in all the important trade centers throughout the United States and Canada. The other association, the Trades Assembly of Kansas City, Kan., is a body composed of representatives of many different labor organizations of Kansas City, Kan., and is a branch of a general organization of the same name which exists and operates, by means of local assemblies, in all the principal commercial centers of the United States and Europe. The Oxley Stave Company, the plaintiff below and appellee here, is a Missouri corporation, which is engaged at Kansas City, Kan., where it has a large cooperage plant, in the manufacture of barrels and casks for packing meats, flour, and other commodities. It sells many barrels and casks annually to several large packing associations located at Kansas City, Mo., and Kansas City, Kan., and also has customers for its product in sixteen other States of the Union, and in Europe. Its annual output for the year 1895 was of the value of \$164,173. For some time prior to November 16, 1895, the plaintiff company had used successfully in its cooperage plant at Kansas City, Kan., certain machines for hooping barrels, which materially lessened the cost of making the same. It did not confine itself exclusively to the manufacture of machine-hooped barrels, but manufactured, besides, many hand-hooped barrels, and employed a large number of coopers for that purpose. The wages paid to the coopers in its employ were satisfactory, and no controversy had arisen between the plaintiff and its employees on that score. On or about November 16, 1895, the plaintiff company was informed by a committee of persons representing the local lodge of the Coopers' Union, No. 18, at Kansas City, Kan., that it must discontinue the use of hooping machines in its plant. Said committee further informed the plaintiff that they had already notified one of its largest customers, Swift & Co., that, in making contracts with the plaintiff for barrels, the Coopers' Union would require such customer, in future, to specify that all barrels supplied to it by the plaintiff must be hand-hooped. None of the members of this committee were employees of the plaintiff company, and, with one exception, none of the present appellants were or are in its employ. At a later date the Coopers' Union, No. 18, called to its assistance the Trades Assembly of Kansas City, Kan., for the purpose of enforcing its aforesaid demand; and on or about January 14, 1896, a committee of persons representing both of said organizations waited upon the manager of the plaintiff company, and notified him, in substance, that said organizations had each determined to boycott the product of the plaintiff company unless it discontinued the use of hooping machines in its plant, and that the boycott would be made effective on January 15, 1896. The formal action taken by the Trades Assembly was evidenced by the following resolution:

"To the officers and members of the Trades Assembly, greeting: Whereas, the cooperage firms of J. R. Kelley and the Oxley Cooperage Company have placed in their plants hooping machines operated by child labor; and whereas, said hooping machines is the direct cause of at least one hundred coopers being out of employment, of which a great many are unable to do anything else, on account of age, and at a meeting held by Coopers' Union No. 18 on the 31st of December, 1895, a

committee was appointed to notify the above firms that unless they discontinued the use of said machines on and after the 15th of January, 1896, that Coopers' Union No. 18 would cause a boycott to be placed on all packages hooped by said machines the 15th of January, 1896, and at a meeting held by Coopers' Union No. 18 on the 4th of January, 1896, delegates were authorized to bring the matter before the Trades Assembly in proper form, and petition the assembly to indorse our action, and to place the matter in the hands of their grievance committee, to act in conjunction with the committee appointed by Coopers' Union No. 18 to notify the packers before letting their contracts for their cooperage: Therefore, be it resolved, that this Trades Assembly indorse the action of Coopers' Union No. 18, and the matter be left in the hands of the grievance committee for immediate action.

"Yours, respectfully,

"J. L. COLLINS,
"Secretary Coopers' International Union
of North America, Lodge 18."

It was also charged, and the charge was not denied, that the members of the voluntary organizations to which the defendants belonged had conspired and agreed to force the plaintiff, against its will, to abandon the use of hooping machines in its plant, and that this object was to be accomplished by dissuading the plaintiff's customers from buying machine-hooped barrels and casks; such customers to be so dissuaded through fear, inspired by concerted action of the two organizations, that the members of all the labor organizations throughout the country would be induced not to purchase any commodity which might be packed in such machine-hooped barrels or casks. The bill charged, by proper averments (and no attempt was made to prove the contrary), that the defendants were persons of small means, and that the plaintiff would suffer a great and irreparable loss, exceeding \$100,000, if the defendants were allowed to carry the threatened boycott into effect in the manner and form proposed. The injunction which the court awarded against the defendants was, in substance, one which prohibited them, until the final hearing of the case, from making effective the threatened boycott, and from in any way menacing, hindering, or obstructing the plaintiff company, by interfering with its business or customers, from the full enjoyment of such patronage and business as it might enjoy or possess independent of such interference.

The first proposition contended for by the appellants is that the trial court acted without jurisdiction in awarding an injunction. The ground for this contention consists in the fact that in the bill, as originally filed, two persons were named as defendants who were citizens and residents of the State of Missouri, under whose laws the Oxley Stave Company was incorporated. But as the case was dismissed as to these defendants, and as to the two voluntary unincorporated associations, and as to all the members thereof who were not specifically named as defendants in the bill of complaint, before an injunction was awarded, and as the bill was retained only as against persons concerned in the alleged conspiracy who were citizens and residents of the State of Kansas, the objection to the jurisdiction of the trial court is, in our opinion, without merit. *Oxley Stave Co. v. Coopers' International Union of North America*, 72 Fed., 695. It is further urged that the trial court had no right to proceed with the hearing of the case in the absence of any of the persons who were members of the two voluntary organizations, to wit, the Coopers' Union, No. 18, and the Trades Assembly of Kansas City, Kan., because

all the members of those organizations were parties to the alleged conspiracy. This contention seems to be based on the assumption that every member of the two organizations had the right to call upon every other member for aid and assistance in carrying out the alleged conspiracy, and that an injunction restraining a part of the members from rendering such aid and assistance would necessarily operate to the prejudice of those members who had not been made parties to the suit. In other words, the argument is that certain indispensable parties to the suit have not been made parties, and that full relief, consistent with equity, can not be administered without their presence upon the record. We do not dispute the existence of the rule which the defendants invoke, but it is apparent, we think, that it has no application to the case in hand. The present suit proceeds upon the theory—without which no relief can be afforded—that the agreement entered into between the members of the two voluntary associations aforesaid is an unlawful conspiracy to oppress and injure the plaintiff company; that no right whatsoever can be predicated upon, or have its origin in, such an agreement; and that the members of the two organizations are jointly and severally liable for whatever injury would be done to the plaintiff company by carrying out the object of the alleged agreement. The rule is as well settled in equity as it is at law that, where the right of action arises *ex delicto*, the tort may be treated as joint or several, at the election of the injured party, and that he may, at his option, sue either one or more of the joint wrongdoers. (Cunningham v. Pell, 5 Paige, 607; Wall v. Thomas, 41 Fed., 620, and cases there cited.) We perceive no reason, therefore, why the case was not properly proceeded with against the appellants, although numerous other persons were concerned in the alleged combination or conspiracy.

We turn, therefore, to the merits of the controversy. The substantial question is whether the agreement entered into by the members of the two unincorporated associations to boycott the contents of all barrels, casks, and packages made by the Oxley Stave Company which were hooped by machinery was an agreement against which a court of equity can afford relief, preventive or otherwise. The contention of the appellants is that it was a lawful agreement, such as they had the right to make and carry out, for the purpose of maintaining the rate of wages then paid to journeymen coopers, and that, being lawful, the injury occasioned to the plaintiff company, no matter how great, was an injury against which neither a court of law nor equity can afford any redress. According to our view of the case, the claim made by the defendants below, that one object of the threatened boycott was to prevent the employment of child labor, is in no way material; but, in passing, it will not be out of place to say that this claim seems to have been a mere pretense, since it was shown that the machinery used to hoop barrels can not be managed by children, but must, of necessity, be operated by persons who have the requisite strength to handle barrels and casks weighing from 75 to 80 pounds with great rapidity. It is manifest that this is a species of labor which could not, in any event, be performed by children. Neither do we deem it necessary on the present occasion to define the term "boycott;" for, whatever may be the meaning of that word, no controversy exists in the present case concerning the means that were to be employed by the members of the two labor organizations for the purpose of compelling the plaintiff company to abandon the use of hooping machines. It is conceded that their purpose was to warn all of the plaintiff's immediate customers not to purchase machine-hooped barrels or casks, and to warn whole-

sale and retail dealers everywhere not to handle provisions or other commodities which were packed in such barrels or casks. This warning was to be made effectual by notifying the members of all associated labor organizations throughout the United States, Canada, and Europe, not to purchase provisions or other commodities, and, as far as possible, to dissuade others from purchasing provisions or other commodities which were packed in machine-hooped barrels or casks. The object of the conspiracy, it will be seen, was to interfere with the complainant's business, and to deprive the complainant company, and numerous other persons, of the right to conduct their business as they thought proper. To this end, those who were engaged in the conspiracy intended to excite the fears of all persons who were engaged in making barrels, or who handled commodities packed in barrels, that, if they did not obey the orders of the associated labor organizations, they would incur the active hostility of all the members of those associations, suffer a great financial loss, and possibly run the risk of sustaining some personal injury. It may be conceded that, when the defendants entered into the combination in question, they had no present intention of resorting to actual violence for the purpose of enforcing their demands; but it is manifest that by concerted action, force of numbers, and by exciting the fears of the timid, they did intend to compel many persons to surrender their freedom of action, and submit to the dictation of others in the management of their private business affairs. Another object of the conspiracy, which was no less harmful, was to deprive the public at large of the advantages to be derived from the use of an invention which was not only designed to diminish the cost of making certain necessary articles, but to lessen the labor of human hands.

While the courts have invariably upheld the right of individuals to form labor organizations for the protection of the interests of the laboring classes, and have denied the power to enjoin the members of such associations from withdrawing peaceably from any service, either singly or in a body, even where such withdrawal involves a breach of contract (*Arthur v. Oaks*, 11 C. C. A., 209, 63 Fed., 310), yet they have very generally condemned those combinations usually termed "boycotts," which are formed for the purpose of interfering, otherwise than by lawful competition, with the business affairs of others, and depriving them, by means of threats and intimidation, of the right to conduct the business in which they happen to be engaged according to the dictates of their own judgments. The right of an individual to carry on his business as he sees fit, and to use such implements or processes of manufacture as he desires to use, provided he follows a lawful avocation, and conducts it in a lawful manner, is entitled to as much consideration as his other personal rights; and the law should afford protection against the efforts of powerful combinations to rob him of that right and coerce his will by intimidating his customers and destroying his patronage. A conspiracy to compel a manufacturer to abandon the use of a valuable invention bears no resemblance to a combination among laborers to withdraw from a given employment as a means of obtaining better pay. Persons engaged in any service have the power, with which a court of equity will not interfere by injunction, to abandon that service, either singly or in a body, if the wages paid or the conditions of employment are not satisfactory; but they have no right to dictate to an employer what kind of implements he shall use, or whom he shall employ. Many courts of the highest character and ability have held that a combination such as the one in ques-

tion is admitted to have been is an unlawful conspiracy, at common law, and that an action will lie to recover the damages which one has sustained as the direct result of such a conspiracy; also, that a suit in equity may be maintained to prevent the persons concerned in such a combination from carrying the same into effect, when the damages would be irreparable, or when such a proceeding is necessary to prevent a multiplicity of suits. The test of the right to sue in equity is whether the combination complained of is so far unlawful that an action at law will lie to recover the damages inflicted, and whether the remedy at law is adequate to redress the wrong. If the remedy at law is for any reason inadequate, resort may be had, as in other cases, to a court of equity. In the case of *Spinning Co. v. Riley*, L. R. 6 Eq., 551, 558, Vice Chancellor Malins held that an injunction was a proper remedy to prevent the officers of a trades union from using placards and advertisements to dissuade laborers from hiring themselves to the spinning company pending a dispute between the latter company and the trades union as wages. The court said:

"That every man is at liberty to induce others, in the words of the act of parliament, 'by persuasion or otherwise,' to enter into a combination to keep up the price of wages, or the like; but directly he enters into a combination which has as its object intimidation or violence, or interfering with the perfect freedom of action of another man, it then becomes an offense, not only at common law, but also an offense punishable by the express enactment of the act 6 Geo. IV., chap. 129. It is clear, therefore, that the printing and publishing of these placards and advertisements by the defendants, admittedly for the purpose of intimidating workmen from entering into the service of the plaintiffs, are unlawful acts, punishable by imprisonment, under Id., chap. 129, and a crime at common law."

In *Temperton v. Russell* [1893] 1 Q. B., 715, the facts appear to have been that a committee representing certain trades unions, for the purpose of enforcing obedience to certain rules that had been adopted by the unions, notified the plaintiff not to supply building materials to a certain firm. He having declined to comply with such request, the committee thereupon induced certain third parties not to enter into further contracts with the plaintiff; such third parties being so induced by threats or representations that the unions would cause their laborers to be withdrawn from their employ in case such further contracts were made. It was held that the plaintiff had a right of action against the members of the committee for maliciously conspiring to injure him by preventing persons from having dealings with him. In delivering the judgment of the court the master of the rolls (Lord Esher) quoted with approval a statement of the law which is found in *Bowen v. Hall*, 6 Q. B. Div., 333, to the effect that where it appears that a defendant has, by persuasion, induced a third party to break his contract with the plaintiff, either for the purpose of injuring the plaintiff, or for the purpose of reaping a personal advantage at the expense of the plaintiff, the act is wrongful and malicious, and therefore actionable. In the case of *State v. Stewart*, 59 Vt., 273, 9 Atl., 559, it was held that a combination entered into for the purpose of preventing or deterring a corporation from taking into its service certain persons whom it desired to employ was an unlawful combination or conspiracy at common law. The court said:

"The principle upon which the cases, English and American, proceed, is that every man has the right to employ his talents, industry, and capital as he pleases, free from the dictation of others; and, if two

or more persons combine to coerce his choice in this behalf, it is a criminal conspiracy. The labor and skill of the workmen, be it of high or low degree, the plant of the manufacturer, the equipment of the farmer, the investments of commerce, are all, in equal sense, property. If men, by overt acts of violence, destroy either, they are guilty of crime. The anathemas of a secret organization of men appointed for the purpose of controlling the industry of others by a species of intimidation that work upon the mind, rather than the body, are quite as dangerous, and generally altogether more effective, than acts of actual violence. And, while such conspiracies may give to the individual directly affected by them a private right of action for damages, they at the same time lay the basis for an indictment, on the ground that the State itself is directly concerned in the promotion of all legitimate industries and the development of all its resources, and owes the duty of protection to its citizens engaged in the exercise of their callings."

In *Barr v. Trades Council* (N. J. Ch.), 30 Atl., 881, it appeared that a publisher of a newspaper had determined to use plate matter in making up his paper, whereupon the members of a local typographical union, conceiving their interests to be prejudiced by such action, entered into a combination to compel him to desist from the use of such plate matter. The object of the combination was to be accomplished by the typographical union by a formal call upon all labor organizations with which it was affiliated, and upon all other persons who were in sympathy with it, to boycott the paper, by refusing to buy it or advertise in the same. It was held, in substance, that a person's business is property, which is entitled under the law to protection from unlawful interference, and that the combination in question was illegal, because it contemplated a wrongful interference with the plaintiff's freedom of action in the management of his own affairs. Decisions embodying substantially the same views have been made by many other courts. (*Hilton v. Eckersley*, 6 El. & Bl., 47, 74; *Steamship Co. v. McKenna*, 30 Fed., 48; *Casey v. Typographical Union*, 45 Fed., 135; *Thomas v. Railway Co.*, 62 Fed., 803, 818; *Arthur v. Oakes*, 11 C. C. A., 209, 63 Fed., 310, 321, 322. See, also, *Carew v. Rutherford*, 106 Mass., 1; *Walker v. Cronin*, 107 Mass., 555; *State v. Glidden*, 55 Conn., 46, 8 Atl., 890; *Vegelahn v. Gunter* (Mass.), 44 N. E., 1077.) The cases which seem to be chiefly relied upon as supporting the contention that the combination complained of in the case at bar was lawful, and that the action proposed to be taken in pursuance thereof ought not to be enjoined, are the following: *Mogul S. S. Co. v. McGregor*, 23 Q. B. Div., 598; *Id.* [1892], App. Cas., 25; *Continental Ins. Co. v. Board of Fire Underwriters of the Pacific*, 67 Fed., 310; and *Bohn Mfg. Co. v. Hollis*, 54 Minn., 223, 55 N. W., 1119. In the first of these cases the facts were that the owners of certain steamships, for the purpose of securing all the freight which was shipped at certain ports, and doing a profitable business, had formed an association, and issued a circular to shippers at said ports, agreeing to allow them a certain rebate on freight bills, provided they gave their patronage exclusively to ships belonging to members of the association. The association also prohibited its soliciting agents from acting as agents for other competing lines. A suit having been brought against the members of the association, by a competing shipowner, to recover damages which had been sustained in consequence of the formation and action of the association, it was held that the acts complained of were lawful, the same having been done simply for the purpose of enabling the members of the association to hold and extend their trade; in other words, that the acts

complained of amounted to no more than lawful competition in trade. *Continental Ins. Co. v. Board of Fire Underwriters of the Pacific*, was a case of the same character as the one last considered, and involved an application of the same doctrine. It was held, in substance, that an association of fire underwriters which had been formed under an agreement that provided, among other things, for the regulation of premium rates, the prevention of rebates, compensation of agents, and nonintercourse with companies that were not members of the association, was not an illegal conspiracy, and that the accomplishment of its purpose by lawful means would not be enjoined at the suit of a competing insurance company which was not a member of the association. In the case of *Bohn Mfg. Co. v. Hollis*, it appeared that a large number of retail lumber dealers had formed a voluntary association, by which they mutually agreed that they would not deal with any manufacturer or wholesale dealer who should sell lumber directly to consumers, not dealers, at any point where a member of the association was carrying on a wholesale lumber business, and had provided in their by-laws that, whenever any wholesale dealer or manufacturer made any such sale, the secretary of the association should notify all members of the fact. The plaintiff having made such a sale, and the secretary being on the point of sending a notice of the fact to members of the association, as provided by the by-laws, it was held that the sending of such a notice was not actionable, and that an injunction to restrain the sending of such notice ought not to issue. The decision to this effect was based on the ground that the members of the association might lawfully agree with each other to withdraw their patronage, collectively, for the reasons specified in the agreement, because the members, individually, had the right to determine from whom they would make purchases, and to withdraw their patronage at any time, and for any reason which they deemed adequate. We are not able to concede, however, that it is always the case that what one person may do without rendering himself liable to an action many persons may enter into a combination to do. It has been held in several well-considered cases that the law will sometimes take cognizance of acts done by a combination which would not give rise to a cause of action if committed by a single individual, since there is a power in numbers, when acting in concert, to inflict injury, which does not reside in persons acting separately. (*Steamship Co. v. McGregor* [1892], App. Cas., 24, 25; *Id.*, 23 Q. B. Div., 598, 616; *Arthur v. Oakes*, 11 C. C. A., 209, 63 Fed., 310, 321; *State v. Glidden*, 55 Conn., 46, 8 Atl., 890.) But if we concede that the reasoning employed in *Manufacturing Co. v. Hollis* was sound, as applied to the facts in that case, yet it by no means follows (and that fact was recognized in the decision) that the members of the association would have had the power to combine for the purpose of compelling other persons, not members of the association, to withhold their patronage from a wholesale dealer who failed to conduct his business in the mode prescribed by the association.

We think it is entirely clear, upon the authorities, that the conduct of which the defendants below were accused can not be justified on the ground that the acts contemplated were legitimate and lawful means to prevent a possible future decline in wages, and to secure employment for a greater number of coopers. No decrease in the rate of wages had been threatened by the Oxley Stave Company, and, with one exception, the members of the combination were not in the employ of the plaintiff company. The members of the combination undertook to prescribe the manner in which the plaintiff company should manufacture barrels and

casks, and to enforce obedience to its orders by a species of intimidation which is no less harmful than actual violence, and which usually ends in violence. The combination amounted, therefore, to a conspiracy to wrongfully deprive the plaintiff of its right to manage its business according to the dictates of its own judgment. Aside from the foregoing considerations, the fact can not be overlooked that another object of the conspiracy was to deprive the public at large of the benefits to be derived from a labor-saving machine which seems to have been one of great utility. If a combination to that end is pronounced lawful, it follows, of course, that combinations may be organized for the purpose of preventing the use of harvesters, threshers, steam looms, and printing presses, typesetting machines, sewing machines, and a thousand other inventions which have added immeasurably to the productive power of human labor, and the comfort and welfare of mankind. It results from these views that the injunction was properly awarded, and the order appealed from is accordingly affirmed.

CALDWELL, Circuit Judge (dissenting). To prevent the merits of the case from being misconceived or obscured, it is well to state at the threshold what it does, and what it does not, involve. It involves no question of the obstruction of interstate commerce, or the United States mails, or any other Federal right. The bill does not charge that the defendants violated any law of the State of Kansas or of the United States, or that they threaten to do so, or that they are guilty of any breach of the public peace, or that any violence or injury to person, or to public or to private property, was perpetrated, threatened, contemplated, or feared. To show precisely what the suit does involve, that portion of the bill which states the plaintiff's grounds of complaint is here copied:

"And your orator alleges and charges that the said defendants have combined, confederated, and conspired together to require of your orator to discontinue in its plant and plants the use of said hooping machines, and, upon refusal of your orator so to do, to boycott the product of your orator's said plant and plants; that is to say, to persuade and coerce all other persons to abstain from having any business relations with your orator, or to patronize your orator by purchasing from your orator the said product and output of your orator's said plants, or from being customers of your orator, or from buying anything from your orator, or sustaining any business relations to your orator, and to so induce, persuade, and coerce all persons to discontinue all dealings with your orator, if your orator shall refuse to comply with the said request and demand of the said defendants, and to exclude your orator from business relations with the public, and to practically break up, suspend, and ruin your orator's business, if your orator shall refuse to accede to the said demand of said conspirators; and the said defendants have so conspired as aforesaid, and to accomplish said conspiracy, by serving notice upon all persons engaged in any business, of a kind in which the product and output of your orator's plant are used, not to patronize your orator, upon pain of withdrawal of patronage from such persons of said conspirators, and of various members of their said organizations, and of all affiliated and sympathizing kindred organizations, and that said conspirators, and those associated with, related to, and subject to the control of, said conspirators consist of a vast body of people, the number of which is unknown to your orator, in all of the great commercial and trade centers of this and other countries, and possess great power, and are able to, and if unchecked will, do to your orator great damage and injury."

The ground upon which the jurisdiction in equity is rested is that the defendants are, in the language of the opinion of the court, "persons of small means." It will be observed that the bill alleges specifically how the "boycott" was to be conducted, and also how the "conspiracy" was to be accomplished, and that force, threats, or violence is not an element either of the boycott or the alleged conspiracy. Any contention that the defendants meditated violence is silenced by the statement in the brief of the plaintiff's attorney that "it is fair to presume, from the resolution and other testimony, that the defendants were determined to use all means, short of violence, to make the proscription effective." The material part of the answer of the Coopers' International Union appears in the affidavit of its president, and is as follows:

"That about a year and a half prior to the commencement of this action the complainant company commenced to operate certain hooping machines (i. e., machines for cutting hoop locks in, and putting wooply hoops upon, tierces and barrels); that said machines were attended to, and operated by, child labor in said shop (in many instances by children under the age of fourteen years), and that in the operation of said machines the said children were constantly exposed to serious injury, by reason of tender years, inexperience, and the manner of the operation of said machines; that the tierces or barrels hooped by these machines were of an inferior quality, and the said lock, and the manner of locking the hoops thereon, being of such a construction that the said tierces and barrels were unable and unsuitable for the purpose of handling and holding for transportation the products of the packing houses and various other manufacturers—a fact that was recognized and well known by many of the packing concerns in and about Wyandotte County, Kans. Affiant further says that during the time of his employment by the complainant company there has been returned to said company, as defective and unfit for use, as high as forty-seven out of a shipment of fifty machine-made barrels, and that the percentage of machine-hooped barrels returned to the complainant company as defective was, of an average, ten times as many as returned from the hand-hooped shipments, even though the complainant company employed and retained a large number of unskillful and inefficient men, engaged in hooping barrels and tierces, which said men were not members of said Coopers' Union, and, by reason of their inefficiency, could not become members thereof; that, by reason of the unworkmanlike and defective barrels manufactured and turned out by the said machines, the wages and compensation of the aforesaid journeymen coopers employed in the cooperage establishments of Wyandotte County, Kans., were threatened to be materially lowered and reduced, in this, to wit: that in the use of said machines in connection with child labor the said complainant company were enabled to, and did, discharge (throw out of employment) a large number of competent and efficient journeymen coopers, citizens of the State of Missouri, and citizens of the State of Kansas, and members of the said Coopers' Union, and that thereafter the said Coopers' Union was informed by some, if not all, of the various cooperage establishments in Wyandotte County, Kans., that unless the complainant company ceased to operate said machines, and to flood the market with the cheap and inferior tierces and barrels, they would be obliged to reduce the wages and compensation paid by them to journeymen coopers employed in their various plants, and that one cooperage establishment did reduce the price and compensation of said journeymen coopers, and also threatened the said journeymen coopers belonging to said Coopers' Union with

discharge unless the said output and competition of the cheap and inferior product be taken out of the market; * * * that at no time during the said controversy between said Coopers' Union and said Trades Assembly and the said complainant company has there been any violence threatened or contemplated, and that at no time during said period has there been any unlawful interference with the business of the said complainant company, or has any unlawful interference been threatened; that it is the intention of the said Coopers' Union and Trades Assembly, in case the said complainant company insists upon the use of said machines, and the consequent deprivation of the workingmen, members of said Coopers' Union, of their means of livelihood, that they will request (without in any manner threatening violence, or without making any demonstration of force, and without the use of violence, force, or any coercion of any kind) the cooperation of their fellow-workingmen in refusing to purchase or use commodities packed in said defective tierces and barrels manufactured by machinery and child labor; * * * that the action of the said Coopers' Union and said Trades Assembly are simply acts of business competition, opposing the said complainant company, together with all other persons manufacturing wooden, machine-hooped tierces and barrels, and their attempt to use and foist upon the public, machine and child-labor manufactured barrels and tierces; and assisting the said workingmen in securing and protecting their wages and their source of livelihood."

These excerpts from the pleadings accurately present the issues between the parties. In the plaintiff's bill, and the court's opinion, the words, "conspiracy," "threats," and "coerce," are freely used. Indeed, the plaintiff's case is made to rest upon the use of these terms. It is important, therefore, at the threshold, to inquire what is meant by the use of these legal epithets in this case. Unexplained, they have an evil import. A conspiracy is defined to be:

"A combination of persons for an evil purpose; an agreement between two or more persons to do in concert something reprehensible, and injurious or illegal; particularly, a combination to commit treason or excite sedition or insurrection; a plot; concerted treason." (Cent. Dict.)

From the earliest times the word has been used to denote a highly criminal or evil purpose. Thus, in Acts xxiii, 12, 13, it is said:

"And, when it was day, certain of the Jews banded together, and bound themselves under a curse, saying that they would neither eat nor drink till they had killed Paul. And they were more than forty which had made this conspiracy."

Plainly, nothing the defendants did, or are charged with intending to do, comes within this definition of a conspiracy. So as to "threats." In the common acceptation, a threat means the declaration of a purpose to commit a crime or some wrongful act. Now, what the defendants did, and all they did, is explicitly testified to by Mr. Cable, the president of the Coopers' International Union. He says that the Coopers' Union gave complainant notice—

"That unless their use of said machines, and competition of the inferior tierces and barrels with the hand-hooped barrels of the journeymen coopers, members of said association, should cease on or before January 15, 1896, that a boycott would be declared by said Coopers' Union upon the contents of the tierces and barrels hooped by the hooping machines in Wyandotte County, Kans.; meaning thereby that the members of said Coopers' Union, and of its parent association, the Trades Assem-

bly, would thereafter cease to purchase or use any commodities that were packed in machine-hooped tierces and barrels."

Many other witnesses testified to the same effect, and there is no testimony to the contrary. The "conspiracy" charged upon the defendants consisted, then, in the Coopers' Union and the Trades Assembly agreeing not "to purchase or use any commodities that were packed in machine-hooped tierces and barrels, which came in competition with the hand-hooped barrels," which were the product of their labor (and the bill charges no more); and the "threats" consisted in giving the complainant and certain packing houses formal notice of this purpose. The alleged "conspiracy," therefore, was the agreement stated, and the alleged "threats" were the notice given by that agreement, and the "coercion" was the effect that this agreement and notice had on the minds of those affected by them. It is not true that there is nothing in a name. When for "conspiracy" we substitute "agreement," and for "threats" a "notice," the whole fabric of the plaintiff's case falls to the ground. "There are," says Dr. Lieber (Civil Liberty and Government), "psychological processes which indicate suspicious intentions;" and among them is the use of high-sounding and portentous terms, from which much may be implied or imagined, instead of using plain and common words, which accurately describe the action, and leave nothing to implication or imagination. If an act done or threatened to be done is lawful, it can not be made unlawful by giving it a name which imports an illegal act. Names are not things. It is the thing done or threatened to be done that determines the quality of the act, and this quality is not changed by applying to the act an opprobrious name or epithet. Unless the definition of a word fits the act, the definition is false, as applied to that act. "Conspiracy" sounds portentous, but in this instance its sound is more than its meaning. As here used, it describes a perfectly innocent act—as much so as if the charge was that the defendants "conspired" to feed a starving comrade, or to bury a dead one. But if the bill charged, and the proof showed, that a breach of the peace was imminent, that fact would not confer jurisdiction on a court of chancery. Courts of equity have no jurisdiction to enforce the criminal laws. It is very certain that a federal court of chancery can not exercise the police powers of the State of Kansas, and take upon itself either to enjoin or to punish the violation of the criminal laws of that State. It is said by those who defend the assumption of this jurisdiction by the Federal courts that it is a swifter and speedier mode of dealing with those who violate or threaten to violate the laws than by the prescribed and customary method of proceeding in courts of law; that it is a "short cut" to the accomplishment of the desired object; that it avoids the delay and uncertainty incident to a jury trial, occasions less expense, and insures a speedier punishment. All this may be conceded to be true. But the logical difficulty with this reasoning is that it confers jurisdiction on the mob equally with the chancellor. Those who justify or excuse mob law do it upon the ground that the administration of criminal justice in the courts is slow and expensive, and the results sometimes unsatisfactory. It can make little difference to the victims of short-cut and unconstitutional methods, whether it is the mob or the chancellor that deprives them of their constitutional rights. It is vain to disguise the fact that this desire for a short cut originates in the feeling of hostility to trial by jury—a mode of trial which has never been popular with the aristocracy of wealth, or the corporations and trusts. A distrust of the jury is a distrust of the people, and a distrust of the people

means the overthrow of the government our fathers founded. Against the exercise of this jurisdiction the Constitution of the United States interposes an insurmountable barrier. In that masterly statement of the grievances of our forefathers against the government of King George, and which they esteemed sufficient to justify armed revolution, are these: "He has combined with others to subject us to a jurisdiction foreign to our constitution and unacknowledged by our laws;" and "For depriving us in many cases of the benefit of trial by jury." Smarting under these grievances, the people of the United States, under the lead of Mr. Jefferson, were extremely careful to place it beyond the power of any department of the Government to subject any citizen "to a jurisdiction foreign to our constitution and unacknowledged by our laws," or to deprive any citizen "of the benefit of trial by jury." This was accomplished by inserting in the Constitution of the United States these plain and unambiguous provisions:

"The trial of all crimes, except in cases of impeachment, shall be by jury." (Const., art. 3.) "No person shall be held to answer for a capital or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia when in actual service in time of war or public danger." (Const. Amend., art. 5.) "In all criminal prosecutions the accused shall enjoy the right to a speedy and public trial by an impartial jury. * * *" (Id., art. 6.) "In suits at common law where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved." (Id., art. 7.)

These mandatory provisions of the Constitution are not obsolete, and are not to be nullified by mustering against them a little horde of equity maxims and obsolete precedents originating in a monarchical government having no written constitution. No reasoning and no precedents can avail to deprive the citizen accused of crime of his right to a jury trial, guarantied to him by the provisions of the Constitution, "except in cases arising in the land and naval forces, or in the militia when in actual service in time of war or of public danger." These exceptions serve to emphasize the right, and to show that it is absolute and unqualified, both in criminal and civil suits, save in the excepted cases. These constitutional guaranties are not to be swept aside by an equitable invention which would turn crime into a contempt, and enable a judge to declare innocent acts crimes, and punish them at his discretion. But notwithstanding the Constitution expressly enumerates the only exceptions to the right of trial by jury, and positively limits those exceptions to the cases mentioned, those who favor government by injunction propose to ingraft upon that instrument numerous other exceptions which would deprive the great body of the citizens of the republic of their constitutional right of trial by jury. With the interpolations essential to support government by injunction, the Constitution would contain the following further exceptions to the right of trial by jury:

"And except when many persons are associated together for a common purpose, and except in the case of members of trades unions, and other labor organizations, and except in cases of all persons 'of small means.'"

Undoubtedly, it is the right of the people to alter or abolish their existing government, "and," in the language of the Declaration of Independence, "to institute a new government, laying its foundations on such principles, and organizing its powers in such form as to them shall seem most likely to effect their safety and happiness." It is com-

petent for the people of this country to abolish trial by jury, and confer the entire police powers of the state and nation on Federal judges, to be administered through the agency of injunctions and punishment for contempts; but the power to do this resides with the whole people, and it is to be exercised in the mode provided by the Constitution. It can not be done by the insidious encroachments of any department of the Government. Our ancestors, admonished by the lessons taught by English history, saw plainly that the right of trial by jury was absolutely essential to preserve the rights and liberties of the people, and it was the knowledge of this fact that caused them to insert in the Constitution the peremptory and mandatory provisions on the subject which we have quoted. English history is replete with examples showing that the king and his dependent and servile judges would have subverted the rights and liberties of the English people, but for the good sense and patriotism of English juries. It is to the verdicts of the juries, and not to the opinions of the judges, that the English people are chiefly indebted for some of their most precious rights and liberties. A brief reference to one or two of the many cases will serve to illustrate this truth, and show why a trial by jury is the only sure and safe refuge the citizen has for his rights and liberties:

William Penn and William Mead were Quaker preachers. Their religious faith was offensive to the king, and to his judges and the governing class. The Quaker meeting house having been closed against them, the congregation assembled, in that quiet and orderly manner characteristic of Quakers, in an open place near their meeting house, where Penn was preaching to them, when they were set upon by the police and violently dispersed. For this Penn and Mead, and not the police who created the disturbance, were indicted. The indictment charged:

"That by agreement between him [Penn] and William Mead before made, and by abetment of the aforesaid William Mead, then and there, in the open street, did take upon himself to preach and speak, and then and there did preach and speak unto the aforesaid William Mead and other persons."

The indictment, like the complaint in this case, bristled with charges of conspiracy, unlawful assembly, etc. Penn, being denied counsel, was compelled to defend himself. When arraigned, he pleaded "Not guilty," and the following, among other, proceedings took place in court during his trial:

"Penn: I affirm I have broken no law, nor am I guilty of the indictment that is laid to my charge; and to the end the bench, the jury, and myself, with these that hear us, may have a more direct understanding of this procedure, I desire you would let me know by what law it is you prosecute me, and upon what law you ground my indictment. Rec.: Upon the common law. Penn: Where is that common law? Rec.: You must not think that I am able to run up so many years, and over so many adjudged cases, which we call 'common law,' to answer your curiosity. Penn: This answer, I am sure, is very short of my question; for, if it be common, it should not be so hard to produce. * * *"

Despite much browbeating from the court, Penn continued to demand of the court to be shown the law that made it a crime for him to preach, and for his congregation to assemble to hear him. Finally the court ordered the bailiff to:

"Take him away. Take him away. Turn him into the bail dock." Continuing his defense, Penn said:

"Must I therefore be taken away because I plead for the fundamental

laws of England? However, this I leave upon your consciences, who are of the jury, and my sole judges—that if these ancient fundamental laws, which relate to liberty and property, and are not limited to particular persuasions in matters of religion, must not be indispensably maintained and observed, who can say he hath right to the coat upon his back?”

Despite the peremptory charge of the court to find Penn guilty of the alleged “conspiracy” and “unlawful and tumultuous assembly,” the jury returned a verdict of “guilty of preaching only.” At this the court fell into a passion, browbeat the jury, particularly their foreman, Bushel, and sent them out to return a general verdict of guilty. This the jury refused to do, and, after being sent out three or four times, they returned a general verdict of not guilty, whereupon they were fined for contempt of court in rendering the verdict contrary to its instructions and to its interpretation of the facts. (6 How. State Tr., 951.) But the jurors asserted their right to render a verdict in accordance with the dictates of their own consciences and judgments, and the court to which they appealed held that they had that right, and could not be punished for exercising it, and reversed the fine. The Penn Case, and the proceedings that grew out of it, constitute one of the foundation stones in the English bill of rights. With all their astuteness and eager desire to serve the crown, it never occurred to the judges in those days to enjoin the Quakers from meeting, and Penn from preaching to them. This “short cut” would have gotten rid of the jury, and placed Penn and his followers completely in the power of the judges; and, instead of becoming the founder of a great city and commonwealth in a free republic, he would have languished in an English prison for contempt of court, incurred by preaching to his congregation, for he avowed in court “that all the powers upon earth” could not divert or restrain him from that duty.

A bookseller, whose publications contained criticisms on the administration of public affairs, was indicted for publishing a seditious libel. He was tried before the chief justice. “In vain,” says an authentic history, “did Lord Ellenborough, uniting the authority of the judge with the arts of the counsel, strive for a conviction. Addressing the jury, he said, ‘Under the authority of the libel act, and still more in obedience to his conscience and his God, he pronounced this to be a most infamous and profane libel.’ But the jury were proof against his authority and his persuasion.” (2 May, Const. Hist. Eng.) They returned a verdict of not guilty, thus vindicating the freedom of the press, and the right to criticise the administration of public affairs.

Seven bishops presented a respectful petition to the king, praying for the enforcement of the laws of the kingdom, and for a redress of grievances. For this they were indicted for libel. It is worth while to note the charge of the judges to the jury. The chief justice said: “And I must, in short, give you my opinion: I do take it to be a libel.” And Justice Allibone said to the jury: “Then I lay this down for my next position: That no private man can take upon him to write concerning the Government at all; for what has any private man to do with the Government, if his interest be not stirred or shaken?” and much more to the same effect. After receiving this charge, the jury, says Lord Campbell, “were marched off in the custody of a bailiff, who was sworn not to let them have meat or drink, fire or candle, until they were agreed upon their verdict. All night were they shut up; Mr. Arnold, the king’s brewer, standing out for a conviction until six next morning, when, though dreadfully exhausted, he was thus addressed by a brother jurymen: ‘Look at me. I am the biggest and

strongest of the twelve; but, before I find such a petition as this a libel, why, I will stay until I am no bigger than a tobacco pipe.' The court sat again at ten the next morning, when the verdict of not guilty was pronounced, and a shout of joy was raised, which was soon reverberated from the remotest parts of the kingdom." (2 Camp. Ch. Jus., 111.)

Cases similar to these might be multiplied indefinitely, but enough have been cited to show that it was through the good sense, courage, and love of liberty of the sturdy English juries who stood out against the judges that the right of the people to assemble for lawful purposes, and the right to address them when they were assembled, the right of free speech, and the freedom of the press, and the right of petition for the redress of grievances, were secured to the English people. It is profitable to recur occasionally to these historic cases. They shed light on the action of the framers of our Constitution, and explain their resolute and determined purpose to secure to the people of this country the right of trial by jury, against encroachments or invasion from any quarter or upon any pretext, or by any device whatsoever. The framers of the Constitution knew that it was not enough that "the rights of man be printed, and that every citizen have a copy." The rights and liberties guarantied to the people by the Constitution would avail them nothing unless they were constantly and carefully guarded from invasion and encroachment from any quarter. They had formed a "government of the people, by the people, for the people," and they committed the protection and defense of the rights of the people under that government to the only agency that could be trusted—to a jury of the people. They put the rights and liberties of the people in the keeping of the people themselves. The king of England, when a petition was presented to him, reciting his encroachments on the rights and liberties of his subjects, and praying for a redress of grievances, returned for answer that "the king's prerogative is to defend the people's liberties." The assurance was not comforting, and brought no relief. Our fathers invested the prerogative of maintaining and defending the people's rights and liberties in the people themselves—in a jury. English judges of great learning and ability had sided with the crown and the aristocratic classes in oppressing the people, and denying them those rights and liberties to which they had an undoubted right by natural law, as well as under their charters of liberty. This denial had been, in a large measure, rendered nugatory by the firm stand for liberty taken by English juries. "History repeats itself." This maxim was not lost on the framers of our Constitution. They intended to, and did, interpose an insuperable barrier to the loss of, or the impingement upon, the rights and liberties of the people, by the same agencies that vexed our English ancestors. That insuperable barrier was trial by jury. In this country the right of wage-earners and others to associate together and act collectively is not a boon granted by the Government. It is not derived from the Constitution, statutes, or judicial decisions. It antedates the Constitution. It is a natural and inherent right. It is the natural weapon of weakness. Its only enemies are despots, and those who would oppress the weak in the absence of the protection afforded them by organization and combined action. This right of men to combine together for lawful purposes necessarily carries with it the right of combined action. Of what utility is organization without the right of collective action? Collective action is implied in the very term "organization." Organization has no other object. Man, by nature,

is a social being. Association and collective action, by those having common interests, for their protection and material, moral, and mental improvement, is a natural instinct. The British Parliament, whose power of legislation is unrestrained, and the English courts, in the beginning of the struggle between capital and labor, supposed that they could successfully and permanently suppress this instinct; but, happily for mankind, the natural rights of man and the laws of nature proved more powerful and enduring than the acts of Parliament and the judgments of courts. The association of men for combined action was declared to be a conspiracy. The wages of laborers were fixed by acts of Parliament, and it was made a crime for a laborer to refuse to work for the statutory wages, or to demand an increase of wages, or to quit the service of his employer. These acts were rigorously enforced by the courts, and their spirit found expression in the judgments of the courts long after their repeal. The courts did more, however, than simply enforce the acts of Parliament. They supplemented them by laws decreed by themselves—judge-made laws—among which was the one relied on by the majority of the court to convict the defendants in this case of a conspiracy. This invention of the judges was the most effective rule ever devised by the enemies of liberty to deprive men of the natural right of association and cooperation, and to place them completely at the mercy of despotic power, and those whose interest it was to oppress them. Referring to the case of *Bohn Mfg. Co. v. Hollis* (a case which fully supports the contention of the defendants), the majority of the court say:

“The decision to this effect was placed on the ground that members of the association might lawfully agree with each other to withdraw their patronage, collectively, for the reasons specified in the agreement, because the members, individually, had the right to determine from whom they would make purchases, and withdraw their patronage at any time, and for any reason which they deemed adequate. It is not always the case, however, that what one person may do, without rendering himself liable to an action, many persons may enter into a combination to do. There is a power in numbers, when acting in concert, to inflict injury, which does not reside in a single individual; and for that reason the law will sometimes take cognizance of acts done by a combination, when it will not do so when committed by a single individual.”

The proposition here approved by the court, and relied on to weaken the authority of the *Bohn Mfg. Co. Case*, first emanated from an English court. (*Rex v. Journeymen Tailors*, 8 Mod., 11.) As laid down in that case, the formula reads:

“A conspiracy of any kind is illegal, although the matter about which they conspired might have been lawful for them, or any of them, to do, if they had not conspired to do it.”

This proposition, that it is unlawful for men to do collectively what they may do, without wrong, individually, was enunciated more than a century and a half ago, when all manner of association and cooperation among men, offensive to the king, or not in the interest of despotic power or the ruling classes, or not approved by the judges, were declared by the courts to be criminal conspiracies. It was promulgated at a time “when,” in the language of Mr. Justice Harlan in his opinion in *Robertson v. Baldwin*, 165 U. S., 288, 17 Sup. Ct., 333, “no account was taken of a man as man, when human life and human liberty were regarded as of little value, and when the powers of government were employed to gratify the ambition and pleasure of despotic rulers, rather

than promote the welfare of the people," and when laborers had no rights their employers or the courts were bound to respect. The idea of the power of men in association has always been abhorrent to despots, and to those who wish to oppress their fellow-men, because its free exercise is fatal to despotism and oppression. The strength it imparts carries its own protection. In all ages those who seek to deprive the people of their rights justify their action by ancient and obsolete precedents, and by coining definitions suited to their ends. In "that codeless myriad of precedent," running back to the Dark Ages called the "Common Law," it is not difficult to find a precedent for inflicting any injustice or oppression on the common people. But these precedents, so shocking to our sense of right, so inimical to our Constitution and social and economic conditions, and so subversive of the liberty of men, should be permitted to sleep in profound oblivion. They neither justify nor palliate encroachments on the natural and constitutional rights of the citizens. Under this asserted rule, what a man, when acting singly, may lawfully do, he may not do in concert with his neighbor. What all men may lawfully do, acting singly, it is unlawful for any two or more of them to do, acting in concert or by agreement. What each individual member of a labor organization may lawfully do, acting singly, becomes an unlawful conspiracy when done by them collectively. Singly, they may boycott; collectively, they can not. The individual boycott is lawful, because it can accomplish little or nothing. The collective boycott is unlawful, because it might accomplish something. People can only free themselves from oppression by organized force. No people could gain or maintain their rights or liberties, acting singly, and any class of citizens in the state subject to unjust burdens or oppression can only gain relief by combined action. All great things are done, and all great improvement in social conditions achieved, by the organization and collective action of men. It was the recognition of these truths that prompted the promulgation of the proposition we are discussing. The doctrine compels every man to be a stranger in action to every other man. This is contrary to the Constitution and genius of our Government. It is a doctrine abhorrent to freemen. It is in hostility to a law of man's nature, which prompts him to associate with his fellows for his protection, defense, and improvement. Under its operation every religious, political, or social organization in the country may be enjoined from combined action, if their religious faith or political creed or practice is obnoxious to the judge. It was originally designed for this very purpose. In his opinion in the case of *Vegehlahn v. Guntner* (Mass.), 44 N. E., 1081, Judge Holmes says:

"So far, I suppose, we are agreed. But there is a notion, which latterly has been insisted on a good deal, that a combination of persons to do what any one of them lawfully might do by himself will make the otherwise lawful conduct unlawful. It would be rash to say that some as yet unformulated truth may not be hidden under this proposition. But, in the general form in which it has been presented and accepted by many courts, I think it plainly untrue, both on authority and principle. (*Com. v. Hunt*, 4 Metc. (Mass.), 111; *Randall v. Hazelton*, 12 Allen, 412, 414.) There was a combination of the most flagrant and dominant kind in *Bowen v. Matheson* [14 Allen, 502], and in the *Steamship Co. Case*, and combination was essential to the success achieved. But it is not necessary to cite cases. It is plain, from the slightest consideration of practical affairs, or the most superficial reading of industrial history, that free competition means combination, and that the organization of the world, now going on so fast, means an

ever-increasing might and scope of combination. It seems to me futile to set our faces against this tendency. Whether beneficial on the whole, as I think it, or detrimental, it is inevitable, unless the fundamental axioms of society, and even the fundamental conditions of life, are to be changed. One of the eternal conflicts out of which life is made up is that between the effort of every man to get the most he can for his services, and that of society, disguised under the name of 'capital,' to get his services for the least possible return. Combination on the one side is potent and powerful. Combination on the other is the necessary and desirable counterpart, if the battle is to be carried on in a fair and equal way. I am unable to reconcile *Temperton v. Russell* [1893], 1 Q. B., 715, and the cases which follow it, with the *Steamship Co. Case*. But *Temperton v. Russell* is not a binding authority here, and therefore I do not think it necessary to discuss it. If it be true that workingmen may combine with a view, among other things, to getting as much as they can for their labor, just as capital may combine with a view to getting the greatest possible return, it must be true that, when combined, they have the same liberty that combined capital has, to support their interests by argument, persuasion, and the bestowal or refusal of those advantages which they otherwise lawfully control."

The asserted rule has no boundaries or limitations other than the chancellor's discretion. Whatever combined action he wills to permit is lawful. Whatever combined action he wills to prevent is a conspiracy. In this country the right of associate and combined action hangs on no such slender thread. But it is said that chancellors should exercise great caution and circumspection in the application of this rule. But this still leaves the right of combined action dependent on the discretion of a chancellor. Thus far they have exercised great discretion, and applied it to combined action of labor organizations only. A careful student of social and economical questions of the day, and of the status of the labor movements in England, says:

"A growth in civil rights on the part of the mass of citizens has attended the labor movement in England from the beginning until now. Workmen are no longer compelled or expected to act without counsel and without concert. They hold a yearly congress, whose object it is to consult on current questions, to watch their legislation, and to urge the measures they desire. The statute book has thus been rewritten in England, with a wide and just regard for the interest of the workman. The fundamental principles of commercial law have taken on new renderings, and accepted new assertions of right. The action of trade unions in demanding better terms, or even a boycott to secure these terms, is no longer a conspiracy in restriction of trade. These methods have won civil acceptance, and gotten to themselves social and moral forces in each instance according to their merit. They seem to be great means of social renovation, which anticipate and prevent revolution. That marvelous political history by which England has won her liberty is repeating itself in her social institutions. Combination is freely accepted. The principle is recognized—a principle fundamental in social renovation—that men may do collectively, without wrong, what they may do without wrong individually." (Bascom on Social Facts and Principles, 237.)

While laborers, by the application to them of the doctrine we are considering, are reduced to individual action, it is not so with the forces arrayed against them. A corporation is an association of individuals for combined action; trusts are corporations combined together for the

very purpose of collective action and boycotting; and capital, which is the product of labor, is in itself a powerful collective force. Indeed, according to this supposed rule, every corporation and trust in the country is an unlawful combination; for while its business may be of a kind that its individual members, each acting for himself, might lawfully conduct, the moment they enter into a combination to do that same thing by their combined effort the combination becomes an unlawful conspiracy. But the rule is never so applied. Corporations and trusts, and other combinations of individuals and aggregations of capital, extend themselves right and left through the entire community, boycotting and inflicting "irreparable damage" upon, and crushing out, all small dealers and producers, stifling competition, establishing monopolies, reducing the wages of the laborer, raising the price of the food on every man's table, and of the clothes on his back, and of the house that shelters him, and inflicting on the wage earners the pains and penalties of the lockout and the blacklist, and denying to them the right of association and combined action, by refusing employment to those who are members of labor organizations; and all these things are justified as a legitimate result of the evolution of industries resulting from new social and economic conditions, and of the right of every man to carry on his business as he sees fit, and of lawful competition. On the other hand, when laborers combine to maintain or raise their wages, or otherwise to better their condition, or to protect themselves from oppression, or to attempt to overcome competition with their labor or the products of their labor, in order that they may continue to have employment and live, their action, however open, peaceful, and orderly, is branded as a "conspiracy." What is "competition" when done by capital is "conspiracy" when done by the laborers. No amount of verbal dexterity can conceal or justify this glaring discrimination. If the vast aggregation and collective action of capital is not accompanied by a corresponding organization and collective action of labor, capital will speedily become proprietor of the wage earners, as well as the recipient of the profits of their labor. This result can only be averted by some sort of organization that will secure the collective action of laborers. This is demanded, not in the interest of wage earners alone, but by the highest considerations of public policy. In the suggestions on the rights of organized labor submitted by Mr. Olney, Attorney General of the United States, as *amicus curiæ* to the court, in the case of *Platt v. Railroad Co.* (November, 1894), 65 Fed., 660, he said:

"Whatever else may remain for future determination, it must now be regarded as substantially settled that the mass of wage earners can no longer be dealt with by capital as so many isolated units. The time is past when the individual workman is called upon to pit his single, feeble strength against the might of organized capital."

And, speaking of the restrictions imposed upon laborers by the courts, he said:

"They can not help knowing that organized capital is not so restricted. And, when treatment so apparently unfair and discriminating is administered through the instrumentality of a court, the resulting discontent and resentment of employees are inevitably intensified, because the law itself seems to have got wrong, and in some unaccountable manner to have taken sides against them."

A conspiracy is defined to be "any combination between two or more persons to accomplish an unlawful purpose, or a lawful purpose by unlawful means." Let the defendants' action be tested by this rule. Their purpose was to drive the plaintiff's barrels out of the market, by

giving preference to the barrels produced by their labor, and this purpose was to be accomplished by means of the coopers' and trades' unions everywhere refusing to buy the barrels manufactured by the plaintiff, or any of the commodities packed in them by any one. Divested of the legal epithets and verbiage, this is precisely what the defendants propose to do, and all they propose to do. And it is this the court has enjoined them from doing. They are enjoined from refusing to buy the barrels, and the commodities packed in the same. If the defendants are not allowed to determine for themselves what they will not buy, they ought not to be allowed to determine what they will buy; and the court's guardianship should go a step further, and tell them what to buy. If the court can enjoin the defendants from withdrawing their patronage and support from the plaintiff, and persuading others to do the same, it is not perceived why it can not, by a mandatory injunction, make it obligatory upon the defendants to purchase the plaintiff's barrels and their contents, and persuade others to do the same. The invasion of the natural rights and personal liberty of the defendants would be no greater in the one case than in the other. The plaintiff has an undoubted right to hoop its barrels in any mode it sees fit, and the defendants have an undoubted right to refuse to purchase them, or the commodities packed in them, no matter how they are hooped. These are the business rights of the parties, and the exercise of its business right by one party is not an interference with the business right of the other. The defendants' declared purpose not to purchase commodities packed in barrels made by the plaintiff is not an illegal interference with its business, because it is not a business right of the plaintiff to require the defendants to purchase such commodities or to refrain from proclaiming their resolution not to purchase them. In a word, it is none of the plaintiff's business out of whose make of barrels the defendants purchase their meats and other supplies. It is said in the opinion of the court that those persons who did not discontinue the use of the complainant's barrels and the commodities packed in them would "possibly run the risk of sustaining some personal injury." The suggestion is not warranted by any averment in the bill, nor is there a scintilla of evidence in the record to justify it. It does the defendants great injustice. No men could go about a business in a more peaceable, orderly, and law-abiding manner than did these defendants. A rigid purpose of order and keeping the peace presided over all their plans. Their sole purpose was a resolute business nonintercourse. It is, of course, possible for every man to inflict some personal injury on another. That can be predicated of all men, and, if this possibility is a ground for injunction, then every man, including the members of this court, should be enjoined from injuring every other man. If this is a sufficient ground for an injunction, a Federal judge can, at his pleasure, slip an injunction noose over every neck in the Republic. But an injunction is not granted "except with reference to what there is reason to expect in its absence." To enjoin law-abiding men from breaking the law, because it is in their power to break it, is to confound all distinction between the law-abiding man and the lawbreaker. The court say, "No decrease in the rate of wages had been threatened by the Oxley Stave Company." But such reduction of wages was threatened by all the other cooperage establishments. Mr. Cable testifies that the members of the Coopers' Union were notified by "the various cooperage establishments in Wyandotte County, Kans., that unless the complainant company ceased to operate said machines, and to flood the market with the cheap and inferior tierces and barrels, they would be obliged to

reduce the wages and compensation paid by them to journeymen coopers employed in their various plants, and that one cooperage establishment did reduce the price and compensation of said journeymen coopers, and also threatened the said journeymen coopers belonging to said Coopers' Union with discharge unless the said output and competition of the cheap and inferior product be taken out of the market." Mr. Butler testifies "that the effect of the said action of the complainant company has already caused threats to be made of a large reduction of the wages of journeymen coopers employed in the cooperage plants in Wyandotte County, Kans.;" that other cooperage firms have notified their employees "that if the complainant company continued to operate said machines, and continued to place upon the market a cheap and inferior product in competition with the hand-made products of other plants, the said employees must expect a reduction in their wages, or a discharge from their employment." Moreover, independently of this direct testimony, it is obvious that, if the plaintiff's barrels drove out of the market the hand-hooped barrels, all coopers engaged in that branch of the work would lose their employment, and that the plaintiff would eagerly avail itself of any reduction in the wages of coopers by other cooperage establishments. The court further remarks, " * * * With one exception, the members of the combination were not in the employ of the plaintiff company." The very object of labor organizations is to impart to every laborer the strength of all. A great nation will go to war to maintain the rights of its humblest citizen. A nation that would not do this would justly lose the respect of every other nation, and soon no respect would be paid to the rights of its citizens. The cause of one laborer is the cause of all laborers. Organized labor must give to each of its members its collective force and influence, else they will fall, one by one, a sacrifice to the greed of their employers. If labor organizations did not have the right to protect and defend the interests of their members, individually as well as collectively, they would be of no utility, and would soon come under abject submission to capital, which grants nothing of fundamental value to wage earners which it is not coerced to grant by the combined power of the labor organizations, or legislation brought about usually through their influence.

It will appear from a critical examination of the cases cited in support of the court's conclusion that the facts in each one of them entitled to respectful consideration as a precedent are widely different from the facts in this case. In every one of them having any close analogy to the case at bar, there was the element of violence, or threats of violence, or actual trespass upon the person or property, or the threat of it, or some display of physical force, or action which was held to constitute a trespass or implied threat. No one of these elements is found in this case. It is simply and purely a case where the labor organizations resolved that they would not purchase or use the barrels manufactured by the complainant, or any commodities packed therein. This they had an absolute right to do, without regard to the question how the complainant's barrels were manufactured, or whether they were inferior to, or better than, the hand-hooped barrels produced by the labor of the defendants. The grounds of the boycott are wholly immaterial, in determining the right to boycott. Whether organized labor has just grounds to declare a strike or boycott, is not a judicial question. These are labor's only weapons, and they are lawful and legitimate weapons; and so long as in their use there is no force or threats of violence, or trespass upon person or property, their use can not be restrained.

Laborers are not wards of chancery. A court of chancery has no more authority to interfere with labor organizations, in the conduct of their business, than it has to interfere with the business of corporations and trusts, and other combinations of capital, in the conduct of their business; and in the case of a strike or boycott, as long as each side is orderly and peaceful, they must be permitted to terminate their struggle in their own way, without extending to one party the adventitious aid of an injunction.

Something is said about its being against public policy to boycott articles made by machinery. As before said, it is immaterial whether an article is produced by hand labor or machinery. Products produced by machinery are no more exempt from competition and a boycott than the products of hand labor. The products of machines stand on no higher plane, in law or equity, than the like products produced by the labor of man. They may be put in competition with each other, and that competition may be prosecuted precisely as was done in this case.

There are numerous authorities supporting the views of the minority—many of them going far beyond the requirements of this case: *Reynolds v. Everett*, 144 N. Y., 189, 39 N. E., 72; *Sinsheimer v. Garment Workers*, 77 Hun, 215, 28 N. Y. Supp., 321; *Com. v. Hunt*, 4 Metc. (Mass.), 111; *Randall v. Hazelton*, 12 Allen, 412, 414; *Publishing Co. v. Howell* (Or.) 38 Pac., 547; *Bowen v. Matheson*, 14 Allen, 502; *Continental Ins. Co. v. Board of Fire Underwriters of the Pacific*, 67 Fed., 310; *Mogul S. S. Co. v. McGregor*, 21 Q. B. Div., 544, s. c. 23 Q. B. Div., 598; *Bohn Mfg. Co. v. Hollis*, 54 Minn., 223, 55 N. W., 1119; *McHenry v. Jewett*, 90 N. Y., 58; *Gilbert v. Mickle*, 4 Sandf. Ch., 357. The force of the *Steamship Mogul Case*, and others of the cases cited, is attempted to be broken by the statement that these were cases of “lawful competition in trade,” and therefore not applicable to the defendants, who, it is impliedly said, are not entitled to enjoy the right of competition. This is a misconception of what it takes to constitute competition, and of the relation one must sustain to the business to be entitled to the rights of a competitor. The error probably springs from the erroneous assumption that a boycott can not be used as a weapon of competition, or consist with it. Competition is defined to be an “endeavor to gain what another is endeavoring to gain at the same time.” (Cent. Dict.) In such a struggle the boycott is perfectly legitimate. It is resorted to by great corporations and trusts—the sugar trust, the meat trust, the oil trust, and scores of others. That one competing for the mastery in any line of business may rightfully resort to the boycott was decided in the *Steamship Mogul Case*. (*Mogul S. S. Co. v. McGregor*, 15 Q. B. Div., 476.) When that case was before Lord Chief Justice Coleridge, he said:

“It was an application of the plaintiffs for an injunction to restrain the defendants from doing that which was called throughout the case—and which I really see no reason for hesitating to call, also—‘boycotting the plaintiffs.’”

And he refused the injunction, and on appeal his judgment was affirmed.

It is the right of every man to compete with every other man in all lawful business pursuits. Every wage earner has this right. His own interests, no less than the interests of his employer, are at stake. If his employer can not successfully compete with his rivals, he must either go out of business, or reduce the wages of his employees, as was threatened to be done in this case. The wage earner may therefore not only give preference to his employer's commodities, and to the

product of his own labor, but he may carry competition to the bitter end, including the boycott, in order to gain the supremacy in the market for his employer's wares, upon whose successful sale his wages, and in some cases, probably, his existence, depend. Competition is not confined alone to cases where the competitors represent large moneyed capital, and are the exclusive owners of the commodity or business out of which the competition arises. It is a fundamental error to deny to labor the rights and privileges of competition, upon the ground that labor is not capital, and therefore not entitled to any of the rights of capital. It is capital of the very highest and most valuable type. It is the creator of all other capital. Cardinal Manning (a great authority upon any subject upon which he wrote, and who was a profound student of the social and economic problems of the time, with a view of adjusting the relations of the church to existing social conditions), speaking of the laborer and his rights, says:

"Among the English-speaking peoples of the world (that is, in the new world, which seems to be molding our future), a workingman is a free man, both in his person and in the labor of his hand. The mere muscular labor of his arm is his own, to sell as he wills, to whomsoever he wills, wherever and for whatsoever time he wills, and at whatsoever price he can. If his labor be skilled labor, or even half-skilled labor, it is all the more valuable, and absolutely his own possession. In truth, it is the most precious form of capital, which gold and silver may purchase, but on which gold and silver absolutely depend. Money is but dead capital, after all, but the live capital of human intelligence and the human hand is the primeval and vital capital of the world. Unless these rights of labor can be denied, liberty of organization to protect these rights and the freedom founded on them can not be denied." (Letter to Catholic Tablet, April 28, 1887.)

In his first annual message to Congress, Mr. Lincoln expresses the same idea in different language. He said:

"Labor is prior to, and independent of, capital. Capital is only the fruit of labor. Capital could never have existed if labor had not first existed. Labor is the superior of capital, and deserves much the more consideration."

That the struggle between the plaintiff and defendants is purely competitive is a fact proven in the case. Mr. Day, president and general manager of the Western Cooperage Company (an intelligent and disinterested witness), testifies that:

"The present controversy is simply a competition between the proprietors of wood-hooping machines and the journeymen coopers; the former endeavoring to displace the latter by machine, unskilled labor, and the latter endeavoring to protect and maintain their wages and occupation."

It can not be the law that the men and women who do the work of the world, and who produce its wealth, have no rights against the wealth they create, and no right to prefer and promote by lawful and peaceful means the sale of the products of their labor, to secure for themselves continued employment. The "irreparable damage" suffered in business by a vanquished competitor at the hands of his successful rival constitutes no cause of action, either at law or in equity. It is the result of the law of competition, to which all men are subject. They take their chances, and must abide the result, whether it bring fortune or failure. In the Steamship Mogul Case, Lord Chief Justice Coleridge said that it was the resolute purpose of the defendants—

"To exclude the plaintiffs, if they could, and to do so without any

consideration of the results to the plaintiffs if they were successfully excluded. This, I think, is made out, and I think no more is made out than this. Is this enough? It must be remembered that all trade is, and must be, in a sense, selfish. Trade not being infinite—nay, the trade of a particular place or district being, possibly, very limited—what one man gains another loses. In the hand to hand war of commerce, as in the conflicts of public life, whether at the bar, in parliament, in medicine, in engineering (I give examples only), men fight on without much thought of others, except a desire to excel or defeat them.”

And the learned judge held that the plaintiffs could have no redress for their losses; they were losses incident to competition in business, and, as we have seen, to a competition carried on by what the learned chief justice said was “boycotting the plaintiffs.” If every one likely to be “irreparably damaged” by competition could enjoin his competitors from boycotting his wares (that is, refusing to buy or deal in them), there would soon be an end of all competition. Under the existing social and economic conditions, the natural person, it has been well said, is the merest rudiment of a man. He can only make his power felt, promote his interests, and defend his rights by association and combination with others. Business and commercial pursuits of any magnitude are not carried on by natural persons any more. All capital seeks to increase its power by combination, and to that end assumes the form of corporations and trusts. The plaintiff in this case is a corporation. It represents a number of persons associated together for the very purpose of combined and collective action. Many of these combinations are on a gigantic scale. Their power and influence are wellnigh irresistible. They are the employers of the great mass of the laborers. They are formed solely for pecuniary profit, and know no other law than that which promotes their pecuniary interests. They defy all social restraints that would have a tendency to lessen their dividends. What the stockholders want is more dividends, and the best manager is the man who will make them the largest. The struggle is constant between the laborers, whose labor produces the dividends, and those who enjoy them. The manager is tempted to reduce wages to increase dividends, and the laborers resist the reduction, and demand living wages. Sometimes the struggle reaches the point of open rupture. When it does, the only weapons of defense the laborers can appeal to is the strike or the boycott, or both. These weapons they have an undoubted right to use, so long as they use them in a peaceable and orderly manner. This is the only lawful limitation upon their use. That limitation is fundamental, and must be observed. It was observed in the case at bar to its fullest extent. If these weapons are withheld from them, then, indeed, are they left naked to their enemies. One class of men can not rely for protection and the maintenance of their rights upon the justice and benevolence of another class, who would reap profit from their oppression. They must be in a position to compel respect, and make it to the interest of their adversary to grant their reasonable and just demands. Laborers can only do this by making common cause—by organization and collective action. The right of organization itself may as well be denied to them, if the right of peaceful and orderly collective action is denied them. It is vital to the public interests, as well as to laborers, that this should not be done. A labor organization in itself teaches respect for law and order. The conscious obedience to the rules and regulations of the organization inculcates a spirit of obedience to all law. Orderly collective action can be attained through

organization only. In its absence we have the ungoverned and ungovernable mob. A labor organization improves the mental, moral, material, and physical condition of its members. It teaches them how best to perform their duties, and to become expert in their several callings. The great improvement made in the last half century in the condition of the wage earners is due almost exclusively to the power of these organizations. Sir John Lubbock, whose learning and impartiality must be conceded, in a recent volume (*Treasures of Life*) ventures to predict that "the readers of the next generation will be not our lawyers, doctors, shopkeepers, and manufacturers, but the laborers and mechanics;" and, if this prediction is verified, it will be mainly due to the beneficent influence of these organizations. To strike them down at a time when their adversaries are more powerful than they ever were in the history of the world is to take a long step backward into the Dark Ages. It is, indeed, the revival of despotism for laborers, and means their practical enslavement to great aggregations of capital, whose greed takes no note of human destitution and suffering. Their adversaries combine to act collectively, and it is not a conspiracy. It is the business of the law to see that no man or class of men, under any pretext whatever, is granted rights or privileges denied to other men or classes of men. The public order must be secured, and private rights protected, under the constitution and laws, without denying to labor, or any other class of citizens, their natural and constitutional rights. Let the person and property of every citizen be securely protected by fixed laws, and speedy punishment follow the commission of crime. Let the constitutional mode of trial remain inviolate. The necessity for this is illustrated in this case. No American jury could be found who would say these defendants were guilty of a "conspiracy," or of making "threats" to injure any one. Like the jury in the Penn Case, they would say, "Guilty of refusing to purchase the plaintiff's barrels and the commodities packed in them, only," and the common sense of all mankind would respond that that creates neither criminal nor civil liability on any one. The decree of the circuit court should be reversed, and the case remanded, with instructions to dismiss the bill.

EMPLOYERS' LIABILITY—ASSUMPTION OF RISK—*Collins v. Laco-*
nia Car Co., 38 *Atlantic Reporter*, page 1047.—This suit was brought before the supreme court of New Hampshire on exceptions from Belknap County from a judgment rendered below for the plaintiff, Collins, in a suit brought by him against the above-named car company for damages for injuries sustained while in its employ. He was engaged about a "press machine" upon which were uncovered cogwheels upon the right side of the machine where the plaintiff was working. The plaintiff reached to a shelf back of the machine for his apron, and in withdrawing his arm his hand was caught in the gearing of the cogwheels and was injured. At the time of the accident plaintiff had worked on the machine nearly a year. He was about 52 years of age, and of average intelligence. No warning as to the danger from the gearing, or instructions as to the precautions which should be taken to avoid it, was given to him by the defendants; and there was also evi-

dence tending to show that the gearing should have been covered to make it reasonably safe. The plaintiff testified that he knew he would get hurt if he got his hand in the gearing, but that he never thought of the danger, and that, when he took his apron from the shelf, he was not thinking of it, and that, if he had, he supposed he should not have got hurt.

The supreme court rendered its decision March 15, 1895, and reversed the judgment of the court below. From the opinion of said court, delivered by Judge Blodgett, the following is quoted:

The motion for a nonsuit should have been granted. Familiar principles of universal acceptation forbid any other conclusion. The plaintiff's grounds of complaint are solely (1) that the gearing was not reasonably and safely protected, and (2) that the defendants gave him no warning or instruction as to the resulting danger. No recovery can be had upon either of these grounds.

The fact that the gearing was not covered is not of controlling importance. The danger from it was as apparent to the plaintiff as to the defendants; and there was no emergency requiring him to expose himself to the danger. It was obviously one of the "seen dangers" of which the servant assumes the risk by entering upon the employment, even though reasonable precautions have been neglected by the employer. As to all defects and dangers which are open to the observation and within the knowledge and comprehension of master and servant alike, both stand upon common ground; and no recovery can be had for a resulting injury to the latter when he is of sufficient intelligence and knowledge to comprehend the risks incident to the service, which is presumed in the case of an adult person, in the absence of evidence showing the contrary. In such a case an injury to the servant is within the scope of the danger which both the contracting parties contemplated as incidental to the service, and the master can not be held liable for the injury. Much less can he be held liable when, as in the present case, it affirmatively appears, not only that the danger of which the servant complains was open to common observation and within common comprehension, and that he was of sufficient intelligence and knowledge to comprehend it, but that he actually did know and comprehend it. In brief, the plaintiff stands no better than he would have stood if, by special agreement with the defendants, he had assumed the risk of the gearing.

Of still less importance is the fact that no warning or instruction as to the danger from the gearing was given to the plaintiff by the defendants. None was necessary. It would have been a useless formality merely. The most that could have been said to him was that he must keep away from the gearing when the machine was in operation, or he would get hurt. But this would have given him no knowledge he did not already possess. The danger of getting caught in the gearing was perfectly obvious to him, and he therefore knowingly and voluntarily assumed it as one of the ordinary risks of his employment. The duty resting on the master to instruct or warn the servant of all latent and hidden defects or hazards incident to the employment, of which the master knows or ought to know, does not extend to dangers open to ordinary observation, except in cases of youth, inexperience, ignorance, or want of capacity of the servant, and can not be invoked as to patent defects or dangers by a servant of mature capacity and knowledge. As to such defects or dangers as are obvious to the senses, he is bound

to take notice; and when, as in the case of this plaintiff, he admits he knew of the danger and comprehended it, it would be as absurd as it manifestly would be unjust to permit a recovery on the ground that his employers did not warn him of that danger. Judgment for the defendants.

EMPLOYERS' LIABILITY—DUTIES OF THE MASTER—NEGLIGENCE—*Belleville Stone Co. of New Jersey v. Mooney*, 38 *Atlantic Reporter*, page 835.—Suit was brought in the circuit court of Essex County, N. J., by Henry Mooney against the above-named company to recover damages for personal injuries received by him while in the employ of said company. He was injured by being struck by a stone from a blast in a quarry belonging to said company. Judgment was given for Mooney and the company appealed the case to the supreme court of the State which rendered its decision November 12, 1897, and affirmed the judgment of the lower court.

The opinion of the supreme court was delivered by Judge Lippencott and the syllabus of the same, which was prepared by the court, lay down certain principles of the common law as follows:

5. It is the duty of the master to exercise reasonable care to provide a safe place for his servant to work in, for his protection from all but the assumed and accepted dangers, and this duty remains the same where the dangers arise to the servant by reason of the adoption or use of a system by which the business of the master is performed or conducted.

6. If this general duty is intrusted by the master to his agent, superintendent, or coservant of the servant injured, the negligence of such agent or superintendent in the performance of this duty is imputable to the master.

8. Where the master, or one representing the master, as general superintendent of the work, promises a servant engaged in such work to remedy and obviate a certain danger to which the servant has called his attention, this promise does not relieve the servant from the further assumption of the risks of danger if the risks or dangers be obvious or incidental to his employment, or risks the danger of which he in the exercise of ordinary care could discover or know, and the master will not be liable for an injury resulting from such risks; but if the employment of the servant be in such a place or under such circumstances that he can not know of the danger, or it is not obvious to him, he can continue in the employment under the assumption that the promise will be performed for his protection, and the master will be liable for injury to him resulting from the danger arising from the default of the master in the nonperformance of the promise.

9. Where an injury arises to a workman by reason of the united negligence of a master and a fellow-servant, the master is liable to respond for such injuries.

LABELS OF LABORERS' UNIONS—APPLICATION FOR INJUNCTION TO PREVENT UNAUTHORIZED USE OF SAME—*Hetterman et al. v. Powers et al.*, 43 *Southwestern Reporter*, page 180.—Action was brought in the circuit court of Jefferson County, Ky., by Powers and others against Hetterman Brothers and others to restrain them from using a certain cigar label. Judgment was rendered for the plaintiffs, and the defendants appealed the case to the court of appeals of the State, which rendered its decision October 27, 1897, and sustained the judgment of the lower court.

The opinion of said court was delivered by Judge Hazelrigg, and in the course of the same he used the following language:

The appellants were manufacturers and dealers in cigars in Louisville, Ky., and, without right or claim of right, used on boxes of cigars manufactured and sold by them the blue label of the Cigar Makers' International Union of America, a *facsimile* of which is as follows: "Sept., 1880. Issued by Authority of Cigar Makers' International Union of America. Union-Made Cigars. This certifies that the cigars contained in this box have been made by a first-class workman, a member of the Cigar Makers' International Union of America, an organization opposed to inferior, rat-shop, cooly, prison, or filthy tenement-house workmanship. Therefore we recommend these cigars to all smokers throughout the world. All infringements upon this label will be punished according to law. A. Strasser, President, C. M. I. U. of America."

Thereupon appellees Powers, Keiffer, and Wopprice, suing for themselves and all their associate and fellow-members in the Cigar Makers' International Union and the Cigar Makers' Protective Union, No. 32, and joining these two organizations, also, as plaintiffs, brought this action to prevent this alleged wrongful use of the label. The International Union, embracing, according to the petition, some — members, and the local union, some — members, are voluntary, unincorporated labor organizations, composed solely of practical cigar makers. They are workingmen who do not own the products of their labor, being exclusively wage workers. The purpose of these unions, as said in the petition, is, generally, to maintain a high standard of workmanship, and secure fair wages to cigar makers; to elevate the material, moral, and intellectual welfare of the membership; and, by legitimate, organized effort, to secure laws prohibiting labor by children under 14 years of age, the abolition of the "truck" system, the tenement-house cigar manufacture, and the manufacture of cigars by prison convict labor. Other praiseworthy objects are set out, which need not be detailed. It is further averred that, for the purpose of designating the cigars made by members of the unions, the label in controversy was adopted and extensively used as a trade-mark, or certificate of identification, and, when posted on the outside of cigar boxes containing cigars made by members of the unions, it is a guaranty that the cigars are made by first-class workmen, members of the cigar maker's union, etc.; that because the members receive fair wages, and were thus able to furnish good workmanship, the cigars so labeled commanded a higher price than did similarly looking cigars not so labeled; that the label was therefore a source of great profit and benefit to the appellees, and other members of the unions. The appellants, for defense, do not deny the use of the label as charged in the petition, but it is insisted by them that this label does not possess any of the elements of a trade-mark; that the

appellees are engaged in no trade, having nothing to sell, and therefore nothing to protect by a trade-mark; that none of them are engaged in the business of selling cigars; that they are "simply workmen employed by other people making cigars—first by one person, and then another—and those persons sell the cigars;" that the plaintiffs, therefore, "have not shown any property right in the label, as a trade-mark, or otherwise;" moreover, that the membership is an ever-changing one, constantly varying in members, composed of a few thousands to-day, and many thousands to-morrow—"a shifting crowd;" that the plaintiffs, therefore, are not qualified to sue, and have, in fact, no legal rights that can be made the subject of a suit. Moreover, it is urged that the plaintiffs do not come into court with clean hands; that they are members of an organization lately engaged in boycotting the defendants, and attempting to ruin their business; that the label itself can not be approved, either in law or morals, as it denounces other cigars than union-made ones as inferior and unwholesome, and the product of filthy tenement houses, or made by coolies and convicts.

And, first, we may admit that the label is not used as a "trade-mark," in the ordinary sense of that word. It is not a brand put upon the goods of the owner, to separate or distinguish them from the goods of others. But we can not agree, on that account, that it does not represent a valuable right, which may be the subject of legal protection. Why may not those engaged in skillful employments so designate the result of their labor as to entitle them to the fruits of their skill, when it is admittedly a source of pecuniary profit to them? And this though they may not own the property itself. They are not, it is true, "in business" for themselves, in the ordinary sense; but they have property rights, nevertheless. They may not select a label, and be protected in its use apart from its connection with some commodity; but they not only select it in this instance, but they apply it to property, and it does not at all matter that the tangible property is that of another. In order to get the benefit of the superior reputation of cigars made by them, the appellees select and apply this label, as a distinguishing brand or mark; and it would be strange if this thing of value—this certificate of good workmanship, which makes the goods made by them sell, and thus increases the demand for their work—should be entitled to no protection, because those making the selection and application are not business men engaged in selling cigars of their own. The man who is employed for wages is as much a business man as his employer, in the larger sense in which the word "business" has come to be used by statesmen and legislators. In a number of the States, laws have been enacted giving protection to the men engaged in the business of working for wages; and their right of organizing and selecting appropriate symbols to designate the result of their handiwork is recognized, and ordained to be the subject of lawful protection, by the court. Thus, in this State, in April, 1890, a law was enacted by the general assembly providing that "every union or association of working men or women adopting a label, mark, name, brand or device intended to designate the product of the labor of the members of such union, shall file duplicate copies of such label in the office of the secretary of state, who shall then give them a certificate of the filing thereof," and that "every such union may by suit in any of the courts of the State, proceed to enjoin the manufacture, use, display," etc., "of counterfeits or imitations of such labels," etc., "on goods bearing the same, and that the court having jurisdiction of the parties shall grant an injunction restraining such wrongful manufacture, use," etc., "of such labels," etc. This suit was filed before

the adoption of this statute, but it indicates the policy of the law, and the growth or expansion, and perhaps the creation, of legal remedies hardly known to ancient trade-mark law. The learned chancellor below, in an exhaustive opinion, reviewing all the authorities, among other things, said (and we can say it no more clearly) that: "The known reputation of a particular kind of skilled labor, employed in the development of a particular product or class of products, determines, to a large degree, the value or price of such products when put on the markets. To stamp or label a commodity as the product of a particular kind or class of skilled labor, determines the demand for, and the price of, such product or commodity. The marketable price of a commodity influences the scale of wages paid for its manufacture. The higher the price, the higher the wages paid. Hence it is indisputable that the employee, whose skilled labor in the production of a particular commodity creates a demand for the same that secures for him higher, remunerative wages, has as definite a property right to the exclusive use of a particular label, sign, symbol, brand, or device, adopted by him to distinguish and characterize said commodity as the product of his skilled labor, as the merchant or owner has to the exclusive use of his adopted trade-mark on his goods."

In *Cohn v. People*, 149 Ill., 486, 37 N. E., 60, the court upheld the constitutionality of the trades-union act in that State; and as the court, independently of the statute, disposed of one of the contentions of counsel in the case, which is also relied on here, we quote, in part, its argument: "It is next objected that the label, an imitation and counterfeit of which is alleged to have been unlawfully used by plaintiff in error, could not have been rightfully adopted either as a label, trade-mark, or form of advertisement. It is said that it transgresses the rules of morality and public policy. * * * By reference to the label, heretofore set out, it will be seen that it is a certificate, signed by the president of the Cigar Makers' International Union of America, certifying that the cigars contained in the box upon which it was placed were 'made by a first-class workman, a member of the Cigar Makers' International Union of America, an organization opposed to inferior, rat-shop, cooly, prison, or filthy tenement-house workmanship.' And it concludes: 'Therefore we recommend these cigars to all smokers throughout the world.' The purpose, as derived from the label itself, is to send the cigars out to the public with the assurance that they are made by a first-class workman, who belongs to an order opposed to the inferior workmanship designated. It will be observed that the label attacks no other manufacturer of cigars. It says, simply, in effect, 'These cigars are not the product of an inferior, rat-shop, cooly, prison, or filthy tenement-house workmanship.' Can it be said that one may not, without condemning or aspersing the product of other manufacturers, commend the article he has for sale? If he may do so himself, may he not procure the certificate of others as to the quality of the article he puts upon the market?"

Further, we agree with the learned chancellor that there is no competent evidence that the appellees, or any of them, have been engaged in boycotting the appellants, and thus depriving themselves of the right to enforce their legal remedies in a court of equity. Whatever may be said of the letters and circulars looking to this end, and exhibited in the proof, it is not shown by any competent proof that the appellees instigated, or had aught to do with, the attempted boycott. And, moreover, this boycott, which seems to have occurred in 1886, did not in any way grow out of the wrongful use of the label in contro-

versy. On the whole case, therefore, we are of opinion that the law may be justly invoked by organized labor to protect from piracy and intrusion the fruits of its skill and handiwork, and that brain and muscle may be the subject of trade-law rules, as well as tangible property. The judgment is affirmed.

SEAMEN'S WAGES—*Krueger et al. v. The John and Winthrop*, 84 *Federal Reporter*, page 503.—This was a libel by F. A. Krueger and others against the American bark *John and Winthrop* to recover seamen's wages, brought in the United States district court for the northern district of California. The defense to the action was that the libelants had shipped for an entire whaling voyage, and while on such voyage attempted to burn and destroy the vessel, and for that offense the captain, after such investigation as he thought sufficient, suspended the libelants from duty, and imprisoned them on board of the vessel. Upon the trial the captain testified that such action was, in his judgment, necessary for the safety of the vessel. The captain did not, however, of his own knowledge, know that the libelants were in fact guilty of the offense charged against them.

The decision of the district court was rendered December 29, 1897, and allowed the wages claimed. The opinion was delivered by District Judge De Haven, and reads as follows:

The evidence in this case is not such as would warrant the court in finding that the libelants, or either of them, attempted to burn and destroy said bark, *John and Winthrop*, and thus to break up the voyage for which they shipped as seamen on board of said vessel. The fact, if it be a fact, that the captain, in suspending the libelants from duty and imprisoning them on board the ship, acting in good faith, under the belief that they were guilty of attempting to destroy the vessel, is not of itself sufficient to defeat the claims of the libelants in this action. The good faith of the master in that matter would be important, if the libelants were seeking to recover damages for assault or false imprisonment; but in this action, based on the contract set out in the shipping articles, the libelants are entitled to recover if they are not in fact guilty of the charge of attempting to set fire to the vessel. There will be a decree for the libelants.

SEAMEN'S WAGES—COMPLETION OF VOYAGE—*Heinrici et al. v. The Laura Madsen et al.*, 84 *Federal Reporter*, page 362.—This case was brought in the United States district court for the southern district of California to recover seamen's wages. The libelants at San Francisco, Cal., on March 29, 1897, entered into and duly executed articles of agreement with the master of the schooner *Laura Madsen*, upon the terms and conditions set forth in the shipping articles, a part of which reads as follows: "The schooner *Laura Madsen*, of San Francisco, Cal., * * * now bound from the port of San Francisco, Cal., to

Port Blakeley, thence to San Francisco for final discharge, either direct or via one or more ports on the Pacific coast. Either north or south of the port of discharge. Voyage to be repeated one or more times." Another material provision of said articles was as follows: "It is especially understood and agreed that the wages of the said crew shall not be due, nor any part thereof, nor shall the crew be entitled to receive any portion of their pay, except at the master's option, until the completion of the entire voyage above described; and that, in case any of the crew leave the vessel before the completion of the voyage as aforesaid, the persons so leaving shall forfeit to the owners of the said vessel all the wages due them."

The vessel entered upon the voyage from San Francisco and proceeded direct to Port Blakeley, in the State of Washington, where she loaded with a cargo of lumber, and thence sailed direct to the port of San Pedro, in the State of California. After discharge of cargo there the master announced to the seamen his purpose of sailing direct to Port Blakeley, and they then and there demanded their wages, but payment was refused. They remained while the vessel took in ballast and assisted in the same, and after that they again demanded their pay. The master refused to pay them, claiming that the voyage had not been ended and that they were not entitled to their wages. The seamen then and there left the vessel without the master's consent, claiming that the voyage was completed and that they were entitled to their wages.

The decision of the court awarding wages to the seamen was rendered November 1, 1897, and from the opinion, delivered by district Judge Wellborn, the following is quoted:

Libelants contend that they had a right to leave the vessel at the time and place they did, for the reason, among others, that the voyage for which they shipped did not include a return from San Pedro to Port Blakeley; and therefore, when the announcement was made to them by the master of the vessel of his intention to return to Port Blakeley, they were justified in leaving said vessel. Respondents insist that libelants, by leaving the vessel at San Pedro, were guilty of desertion, and therefore forfeited their wages.

If it be conceded (which, however, I do not decide) that the shipping articles allowed the vessel to go from Port Blakeley to San Pedro, no fair construction of the articles would permit the return from San Pedro to Port Blakeley. The voyage is expressly described as being from San Francisco to Port Blakeley, thence to San Francisco, etc. Certainly this language does not imply that the vessel could go from Port Blakeley to some other point, as, for instance, San Pedro and return to Port Blakeley. Whatever may be the true construction of the shipping articles as to the ports at which the vessel could touch in going from Port Blakeley to San Francisco, it is clear that the articles did not permit a return to Port Blakeley from any intermediate port before San Francisco had been reached. A decree for libelants will be entered.

SEAMEN'S WAGES—LEAVING VESSEL—ABUSIVE TREATMENT—*Richards et al. v. The Topgallant*, 84 *Federal Reporter*, page 356.—This was a libel *in rem* against the bark *Topgallant* to recover seamen's wages, heard in the United States district court for the district of Washington, northern division. The following decision of the court was rendered January 3, 1898, by District Judge Hanford:

The libelants shipped at San Francisco for a voyage to Puget Sound and return, and they proceeded in the vessel from San Francisco to Port Blakeley, and thence to Seattle, and, while at Seattle, engaged in taking in cargo, there was difficulty between them and the captain. The captain had given orders to the first mate to move the vessel to a different position for convenience in receiving coal, and the mate neglected to have this done until after working hours. After 7 o'clock in the evening the mate asked the men if they would then haul the ship, to which they answered that they would not, and the vessel was not moved that night, and in consequence of this neglect she was delayed in lading. The captain was absent from the ship from the time of giving the order to the mate to the next morning. On being informed by the mate that the men had refused to haul the ship when requested, he reprimanded the crew, and ordered a discontinuance of coffee and a luncheon, which, until that time, during the loading of the vessel, had been served to the men at 9 o'clock in the forenoon, as an extra in addition to the regular breakfast, dinner, and supper. There is a conflict in the testimony as to the conduct and exact words of the captain at this time, and as to threats which the men allege he made of future severity. A day or two after this occurrence, these libelants informed the captain that they wished to leave the ship, and asked him for their wages, which he refused to pay. He informed them, however, that they could leave the vessel if they wished to, but that, if they did leave, he would not pay them their wages. The libelants did leave the vessel.

It is my opinion that the libelants were not justified in leaving the vessel before termination of the voyage for which they shipped, by reason of abusive treatment at the hands of the captain; neither was their conduct disobedient or insolent to such a degree as to authorize the captain to discharge them, and claim forfeiture of their wages. The libelants, however, wished to leave the vessel, and so informed the captain; therefore they cannot claim that by telling them to go the captain discharged them unjustly, so as to entitle them to wages for the entire voyage. Upon being told by the captain that they could leave the vessel, they had a right to take him at his word, so that their contract for services in the vessel was, in effect, terminated by mutual consent. The captain seems to have acted upon a mistaken idea that the wages of seamen are forfeited by quitting the service before fulfillment of the entire contract, even when in doing so there is no disobedience. But in law seamen can not be treated as deserters, and their wages forfeited, unless they leave the vessel, and remain absent, without leave of the commander. The rule is that, when the seamen's contract is terminated before conclusion, by mutual assent, the seamen are entitled to wages for the time of their actual service at the rate fixed by their contract. If the captain discharges them before the termination of the voyage, without justifiable cause, they are entitled to wages for the entire voyage, and the amount of their expenses in returning to the port of discharge. Deserters from a vessel are not entitled to anything.

LAWS OF VARIOUS STATES RELATING TO LABOR ENACTED SINCE
JANUARY 1, 1896.

[The Second Special Report of the Department contains all laws of the various States and Territories and of the United States relating to labor in force January 1, 1896. Later enactments are reproduced in successive issues of the Bulletin from time to time as published.]

NORTH CAROLINA.

ACTS OF 1897.

VOL. I.—PUBLIC LAWS.

CHAPTER 185.—*Protection of employees as voters.*

SECTION 72. Section seventy-two (72) of said act [chap. 159, acts of 1895] is hereby repealed, and the following substituted therefor: "That any person entitled to vote at any election held under the laws of this State shall, on one of the days set apart for registration for said election, and on the day of such election be entitled to absent himself from service or employment in which he is engaged or employed for a period of time sufficient to enable such person to go and return from the voting place in the precinct wherein such person is entitled to register and vote, while the registration books are open, and while the polls in said precinct are open, if such voter shall notify his employer before the day of such registration or of such election, of such intended absence, and if, thereupon, the time of [such absence] shall be designated by the employer, and such absence shall be during such designated time, or if the employer, upon the days of such notice, makes no designation, and such absence shall be during one of the days for registration or during the day of election, no penalty shall be imposed upon him by his employer by reason of such absence.

Ratified the 9th day of March, A. D. 1897.

CHAPTER 219.—*Convict labor.*

SECTION 5. It shall be the duty of the superintendent of the State's prison—

(2) To employ all convicts in his custody within the penitentiary or on farms leased or owned by the institution, and to make contracts on remunerative terms with persons or corporations in order to employ and support as many of the able-bodied convicts on public works as the interests of the State and the constitution will permit.

(4) To sell at the highest market prices all articles manufactured and products produced by the convicts not deemed necessary for their use and comfort for the next ensuing year as and when he may deem best; but any article or product held more than two months for better prices shall be sold when the board of directors shall direct.

(11) The superintendent may, with the consent of the governor, erect additional shops within the walls of the prison for employment of convicts confined therein, and may lease and equip farms whenever it may become necessary to keep the able-bodied convicts employed:

Ratified the 3d day of March, A. D. 1897.

CHAPTER 251.—*Inspection and regulation of mines.*

SECTION 1. Chapter 113 of the laws of 1887 is amended by adding to the duties of the commissioner of labor statistics that of "mine inspector" as herein provided for, which officer is called in this act "inspector."

SEC. 2. It shall be the duty of the inspector to examine all the mines in the State as often as possible to see that all the provisions and requirements of this act are strictly observed and carried out; he shall particularly examine the works and

machinery belonging to any mine, examine into the state and condition of the mines as to ventilation, circulation and condition of air, drainage and general security; he shall make a record of all examinations of mines, showing the date when made, the conditions in which the mines are found, the extent to which the laws relating to mines and mining are observed or violated, the progress made in the improvements and security of life and health sought to be secured by the provisions of this act, number of accidents, injuries received or deaths in or about the mines, the number of mines in the State, the number of persons employed in or about each mine, together with all such other facts and information of public interest, concerning the condition of mines, development and progress of mining in the State as he may think useful and proper, which record shall be filed in the office of the inspector, and as much thereof as may be of public interest to be included in his annual report. In case of any controversy or disagreement between the inspector and the owner or operator of any mine, or the persons working therein, or in case of conditions of emergencies requiring counsel, the inspector may call on the governor for such assistance and counsel as may be necessary; should the inspector find any of the provisions of this act violated, or not complied with by any owner, lessee or agent in charge, of such neglect or violation, and unless the same is within a reasonable time rectified, and the provisions of this act fully complied with, he shall institute an action to compel the compliance therewith. The inspector shall exercise a sound discretion in the enforcement of this act. For the purpose of making the inspection and examinations provided for in this section, the inspector shall have the right to enter any mine at all reasonable times, by night or by day, but in such manner as shall not necessarily obstruct the working of the mine; and the owner or agent of such mine is hereby required to furnish the means necessary for such entry and inspection; the inspection and examination herein provided for shall extend to fire-clay, iron ore and other mines as well as coal mines.

SEC. 3. The inspector shall make such personal inspection of the mines as he may deem necessary, and his other duties will permit; he shall keep in his office and carefully preserve all maps, surveys and other reports and papers required by law to be filed with him, and so arrange and preserve the same as shall make them a permanent record of ready, convenient and connected reference; he shall compile and consolidate the reports and annually make report to the governor of all his proceedings, the condition and operation of the different mines of the State, and the number of mines and the number of persons employed in or about such mines; the amount of coal, iron ore, limestone, fire-clay or other mineral mined in this State; and for the purpose of enabling him to make such report, the owner, lessee or agent in charge of such mine, who is engaged in mining, and the owner, lessee or agent of any firm, company or corporation in charge of any fire-clay or iron ore mines, or any limestone or quarry, or who is engaged in mining or producing any mineral whatsoever in this State, shall, on or before the 30th day of November in every year, send to the office of the inspector upon blanks, to be furnished by him, a correct return, specifying with respect to the year ending on the preceding 1st day of October, the quantity of coal, iron ore, fire-clay, limestone or other mineral product in such mine or quarry, and the number of persons ordinarily employed in or about such mine or quarry below and above ground, distinguishing the persons and labor below ground and above ground. Every owner, lessee or agent of a mine or quarry who fails to comply with this section, and makes any return which to his knowledge is false in any particular, shall be deemed guilty of a misdemeanor; he shall enumerate all accidents, and the manner in which they occurred in or about the mines, and give all such other information as he thinks useful and proper, and make such suggestions as he deems important relative to mines and mining, and any other legislation that may be necessary on the subject for the better preservation of the life and health of those engaged in such industry.

SEC. 4. It is unlawful for the owner or agent of any coal mine, worked by shaft, to employ or permit any person to work therein, unless there are, to every seam of coal worked in such mine, at least two separate outlets, separated by natural strata of not less than one hundred feet in breadth, by which shafts or outlets distinct means of ingress and egress are always available to the persons employed in the mine; but it is not necessary for the two outlets to belong to the same mine, if the persons employed therein have safe, ready and available means of ingress or egress by not less than two openings. This section shall not apply to opening a new mine, while being worked for the purpose of making communications between said two outlets, so long as not more than twenty persons are employed at one time in such mine; neither shall it apply to any mine or part of a mine in which the second outlet has been rendered unavailable by reason of the final robbing of pillars previous to abandonment, as long as not more than twenty persons are employed therein at any one time. The cage or cages and other means of egress shall at all times be available for the persons employed, when there is no second outlet. The escapement shafts shall be fitted with safe and available appliances by which the persons employed

in the mine may readily escape in case an accident occurs, deranging the hoisting machinery at the main outlets, and such means or appliances of escape shall always be kept in a safe condition; and in no case shall an air-shaft with a ventilating furnace at the bottom be construed to be an escapement shaft, within the meaning of this section. To all other coal mines, whether slopes or drifts, two such openings or outlets must be provided, within twelve months after shipments of coal have commenced from such mine; and in case such outlets are not provided as herein stipulated, it shall not be lawful for the agent or owner of such slope or drift to permit more than ten persons to work therein at any one time.

SEC. 5. The owner or agent of any coal mine, whether shaft, slope or drift, shall provide and maintain for every such mine an amount of ventilation of not less than one hundred cubic feet per minute per person employed in such mine, which shall be circulated and distributed throughout the mine in such a manner as to dilute, render harmless and expel the poisonous and noxious gases from each and every working place in the mine, and no working place shall be driven more than sixty feet in advance of a break through or airway, and all break throughs or airways, except those last made near the working places of the mine, shall be closed up by brattice trap doors, or otherwise so that the currents of air in circulation in the mine may spread to the interior of the mine when the persons employed in such mine are at work, and all mines governed by the statute shall be provided with artificial means of producing ventilation such as forcing or suction fans, exhaust steam furnaces, or other contrivances of such capacity and power as to produce and maintain an abundant supply of air, and all mines generating fire damp shall be kept free from standing gas, and every working place shall be examined every morning with a safety lamp by a competent person or persons before any of the workmen are allowed to enter the mine. All underground entrances to any place not in actual course of working or extension shall be properly fenced across the whole width of such entrance so as to prevent persons from inadvertently entering the same. No owner or agent of any coal mine operated by shaft or slope shall place in charge of any engine used for lowering into or hoisting out of mines persons employed therein any but experienced, competent and sober engineers, and no engineer in charge of such engine shall allow any person except such as may be deputed for such purposes by the owner or agent to interfere with it or any part of the machinery, and no person shall interfere or in any way intimidate the engineer in the discharge of his duties, and in no case shall more than two men ride on any cage or car at one time, and no person shall ride upon a loaded cage or car in any shaft or slope.

SEC. 6. All safety lamps used in examining mines, or for working therein, shall be the property of the operator of the mine, and a competent person shall be appointed for the purpose, who shall examine every safety lamp before it is taken into the workings for use, and ascertain it to be clean, safe and securely locked, and safety lamps shall not be used until they have been so examined and found safe and clean and securely locked, unless permission be first given by the mine foreman, to have the lamps used unlocked. No one, except the duly authorized person, shall have in his possession a key, or any other contrivance, for the purpose of unlocking any safety lamp in any mine where locked lamps are used. No matches or any other apparatus for striking lights shall be taken into any mines, or parts thereof, except under the direction of the mine foreman. All persons violating the provisions of this section shall be deemed guilty of a misdemeanor. The mine foreman shall measure the ventilation at least once a week, at the inlet and outlet, and also at or near the face of all the entries, and the measurement of air so made shall be noted on blanks furnished by the inspector; and on the first day of each month the mine boss of each mine shall sign one of such blanks, properly filled with the said actual measurement, and present the same to the inspector, and any mining boss making false returns of such air measurement shall be deemed guilty of a misdemeanor. Every person having charge of any mine, whenever loss of life occurs by accident connected with the workings of such mines, or by explosion, shall give notice thereof forthwith, by mail or otherwise, to the inspector, and to the coroner of the county in which such mine is situated, and the coroner shall hold an inquest upon the body of the person or persons whose death has been caused, and inquire carefully into the cause thereof, and shall return a copy of the finding and all the testimony to the inspector. The owner, agent or manager of every mine shall, within twenty-four hours next after any accident or explosion, whereby loss of life or personal injury may have been occasioned, send notice, in writing, to the inspector, and shall specify in such notice the character and cause of the accident, and the name or names of the persons killed and injured, with the extent and nature of the injuries sustained; when any personal injury, of which notice is required to be sent under this section, results in the death of the person injured, notice in writing shall be sent to the inspector within twenty-four hours after such death comes to the knowledge of the owner, agent or manager; and when loss of life occurs in any mine by explosion, or accident, the owner, agent or manager of such mine shall notify the inspector forth-

with of the fact, and it shall be the duty of the inspector to go himself, or send a representative, at once to the mine in which said death occurred, and inquire into the cause of the same, and to make a written report, fully setting forth the condition of the part of the mine where such death occurred, and the cause which led to the same; which report shall be filed by the inspector in his office as a matter of record, and for future reference. For any injury to person or property, occasioned by any willful or intentional violation of this act, or any willful failure to comply with its provisions by any owner, agent or manager of the mine, a right of action shall accrue to the party injured for any direct damage he may have sustained thereby; and, in any case of loss of life by reason of such willful neglect of [or] failure aforesaid, a right of action shall accrue to the personal representative of the deceased, as in other actions for wrongful death for like recovery of damages for the injury sustained.

SEC. 7. The owner, agent or manager of any mine shall also give notice to the inspector in any or all of the following cases: 1. When any working is commenced for the purpose of opening a new shaft, slope or mine, to which this act applies. 2. When any mine is abandoned, or the working thereof discontinued. 3. When the working of any mines is recommenced after an abandonment or discontinuance for a period exceeding three months. 4. When a squeeze or crush, or any other cause or change, may seem to affect the safety of persons employed in the mine, or when fire occurs. No boy under twelve years of age shall be allowed to work in any mine, and in all cases of minors applying for work, the agent of such mine shall see that the provisions of this section are not violated; and the inspector may, when doubt exists as to the age of any minors found working in any mine, qualify and examine the said minor, or his parents as to his age. In case any coal miner does not, in appliances for the safety of the persons working therein, conform to the provisions of this act, or the owner or agent disregard the requirements of this act, any court of competent jurisdiction may, on application of the inspector, by civil action in the name of the State, enjoin or restrain the owner or agent from working or operating such mine until it is made to conform to the provisions of this act; and such remedy shall be cumulative, and shall not take the place of or affect any other proceedings against such owner or agent authorized by law for the matter complained of in such action.

SEC. 8. The provisions of this act shall not apply or affect any mine in which not more than ten men are employed at the same time; but the inspector shall at all times have free ingress to such mines for the purpose of examination and inspection and shall direct and enforce any regulation in accordance with the provisions of this act that he may deem necessary for the safety of the health and lives of the miners employed therein; whosoever knowingly violates any of the provisions of this act or does anything whereby the life or health of the persons or the security of any mine and machinery are endangered, or any miner or other person employed in any mine governed by the statutes, who intentionally or willfully neglects or refuses to securely prop the roof of any working place under his control, or neglects or refuses to obey any orders given by the superintendent of a mine in relation to the security of a mine in the part thereof where he is at work and for fifteen feet back of his working place, or any miner, workman or other person who shall knowingly injure any water gauge, barometer, air-course or brattice, or shall obstruct or throw open any air-ways, or shall handle or disturb any part of the machinery of the hoisting engine or signaling apparatus or wire connected therewith, or air-pipes or fittings, or open a door of the mine and not have the same closed again whereby danger is produced either to the mine or those that work therein, or who shall enter any part of the mine against caution, or who shall disobey any order given in pursuance of this act, or who shall do any willful act whereby the lives and health of the persons working in the mines or the security of the mine or the machinery thereof is endangered, or person having charge of a mine whenever loss of life occurs by accident connected with the machinery of such mine or by explosion, who neglects or refuses to give notice thereof forthwith by mail or otherwise to the inspector and to the coroner of the county in which such mine is situated, or any such coroner who neglects or refuses to hold an inquest upon the body of the person whose death has been thus caused, and return a copy of his findings and a copy of all the testimony to the inspector, shall be guilty of a misdemeanor, and upon conviction fined not less than fifty dollars or imprisoned in the county jail not more than thirty days or both. The owner, agent or operator of every coal mine shall keep a supply of timber constantly on hand, and shall deliver the same to the working place of the miner, and no miner shall be held responsible for accident which may occur in the mine where the provisions of this section have not been complied with by the owner, agent or operator thereof, resulting directly or indirectly [from] the failure to deliver such timber.

SEC. 9. This act shall be in force from and after its ratification.

Ratified the 9th day of March, A. D. 1897.

VOL. II.—PRIVATE LAWS.

CHAPTER 56.—*Fellow-servant act—Railroad companies.*

[NOTE.—This chapter was published in Bulletin of the Department of Labor No. 11, page 547, and is therefore omitted here.]

NORTH DAKOTA.

ACTS OF 1897.

CHAPTER 108.—*Convict labor.*

SECTION 1. No person in any prison, penitentiary, or other place for the confinement of offenders in said State, shall be required or allowed to work while under sentence thereto, at any trade, industry or occupation wherein or whereby his work, or the product or profit of his work, shall be farmed out, contracted and given, or sold to any person, firm, association or corporation; but this act shall not be so construed so as to prevent the product of the labor of convicts from being disposed of to the State, or any political division thereof, or to any public institution owned or managed by the State or any political division thereof for their own use; *Provided*, That nothing in this act shall prohibit the use of convict labor by the State in carrying on any farming operations or in the manufacture of brick, or prohibits the State from disposing of the proceeds of such enterprises.

SEC. 2. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

SEC. 3. This act shall take effect and be in force from and after November 1, A. D. 1897.

Approved March 2d, 1897.

UTAH.

ACTS OF 1897.

CHAPTER 11.—*Seats for female employees.*

SECTION 1. The proprietor, manager or person having charge of any store, shop, hotel, restaurant or other place where women or girls are employed as clerks or help therein, shall provide chairs, stools or other contrivances where such clerks or help may rest when not employed in the discharge of their respective duties.

SEC. 2. Any person who shall violate any of the provisions of this act shall be guilty of a misdemeanor.

SEC. 3. This act shall take effect upon approval.

Approved February 24th, 1897.

CHAPTER 19.—*Weighing coal at mines.*

SECTION 1. The owners, agent or operator, of every coal mine in this State, at which the miners are paid by weight, shall provide at such mines suitable and accurate scales of standard manufacture for the weighing of all coal which shall be hoisted or delivered from such mines: *Provided*, That when coal is weighed in the miner's car, such car shall be brought to a standstill on the scales before the weight is taken.

SEC. 2. The owner, agent or operator of such mine shall require the person authorized to weigh the coal delivered from said mine to be sworn before some person having authority to administer an oath, to keep the scales correctly balanced, to accurately weigh and to correctly record the gross or screened weight to the nearest ten pounds of each miner's car of coal delivered from such mine, and such oath shall be kept conspicuously posted at the place of weighing. The record of the coal mined by each miner shall be kept separate, and shall be opened to his inspection at all reasonable hours, and also for the inspection of all other persons pecuniarily interested in such mine.

SEC. 3. In all coal mines in this State the miners employed and working therein may furnish a competent check-weighman at their own expense, who shall at all proper times have full right of access and examination of such scales, machinery or apparatus and seeing all measures, and weights of coal mined and accounts kept of the same, *Provided*, That not more than one person on behalf of the miners collectively shall have such right of access, examination and inspection of scales, measures and accounts at the same time, and that such persons shall make no unnecessary inter-

ference with the use of such scales, machinery or apparatus. The agent of the miners as aforesaid shall, before entering upon his duties, make and subscribe to an oath before some officer duly authorized to administer oaths, that he is duly qualified and will faithfully discharge the duties of check-weighman. Such oath shall be kept conspicuously posted at the place of weighing.

SEC. 4. Any person, company or firm having or using any scale or scales for the purpose of weighing the output of coal at mines so arranged or constructed that fraudulent weighing may be done thereby, or who shall knowingly resort to or employ any means whatsoever by reason of which such coal is not correctly weighed or reported in accordance with the provisions of this act; or any weighman or check-weighman who shall fraudulently weigh or record the weights of such coal, or connive at or consent to such fraudulent weighing, shall be deemed guilty of a misdemeanor.

SEC. 5. Any person, owner or agent operating a coal mine in this State who shall fail to comply with the provisions of this act, or who shall obstruct or hinder the carrying out of its requirements, shall be deemed guilty of a misdemeanor; *Provided* That the provisions of this act shall apply only to coal mines in which ten or more miners are employed in a period of twenty-four hours.

SEC. 6. It shall be the duty of the coal mine inspector, in addition to his other duties, to examine all scales used at any coal mine in the State for the purpose of weighing coal taken out of such mine; and on inspection, if found incorrect, he shall notify the owner or agent of any such mine that such scales are incorrect; and after such notice it shall be unlawful for any owner or agent to use, or suffer the same to be used, until such scales are so fixed that the same will give the true and correct weight. Any person violating the provisions of this section shall be deemed guilty of a misdemeanor.

Approved March 6th, 1897.

CHAPTER 50—SUBCHAPTER 8.—*Protection of employees as voters.*

SECTION 7. * * * It shall [be] unlawful for any employer, either corporation, association, company, firm or person in paying its, their or his employees the salary or wages due them, to inclose their pay in "pay envelopes" on which there is written or printed any political mottoes, devices or arguments, containing threats, express or implied, intended or calculated to influence the political opinion, views, or actions of such employees.

Nor shall it be lawful for any employer, either corporation, association, company, firm or person, within ninety days of any election provided by law, to put up or otherwise exhibit in its, their, or his factory, workshop, mine, mill, boarding house, office or other establishment or place where its, their, or his employees may be working or be present in the course of such employment, any handbill, notice, or placard, containing any threat, notice, or information, that in case any particular ticket or candidate shall or shall not be elected, work in its, their, or his establishment shall cease in whole or in part, or its, their, or his establishment be closed, or the wages of its, their, or his workmen be reduced; or other threats, express or implied, intended or calculated to influence the political opinions or actions of its, their, or his employees.

Any person or persons, or corporation violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and any person, whether acting in his individual capacity or as an officer or agent of any corporation, so guilty of such misdemeanor shall be punished as hereinafter prescribed.

SEC. 8. It shall be unlawful for any corporation or any officer or agent of any corporation to influence or attempt to influence, by force, violence, or restraint, or by inflicting or threatening to inflict any injury, damage, harm, or loss, or by discharging from employment or promoting in employment, or by intimidation, or otherwise in any manner whatever to induce or compel any employee to vote or refrain from voting at any election provided by law, or to vote or refrain from voting for any particular person or persons, measure or measures, at any such election. Any such corporation, or any officer or agent of such corporation, violating any of the provisions of this section shall be deemed guilty of a misdemeanor and be subject to the penalty hereinafter provided, and in addition thereto, any corporation violating this section shall forfeit its charter and right to do business in this State.

SEC. 19. Any person entitled to a vote at a general election held within this State shall, on the day of such election, be entitled to absent himself from any employment in which he is then engaged or employed for a period of two hours between the time of opening and the time of closing the polls, and any such absence shall not be sufficient reason for the discharge of any such person from such service or employment, and such voter shall not, because of so absenting himself, be liable to any penalty, nor shall any deduction be made on account of such absence, from his usual salary or wages except when such employee is employed and paid by the hour; *Provided*, That application shall be made for such leave of absence prior to the day of

election. The employer may specify the hours during which such employee may absent himself as aforesaid. Any person or corporation who shall refuse to his or its employees the privilege hereby conferred, or who shall subject an employee to a penalty or reduction of wages because of the exercise of such privilege, or who shall, directly or indirectly violate the provisions of this title shall be deemed guilty of a misdemeanor.

SEC. 21. All acts, omissions, and neglects of any person, official, or corporation, made an offense by the provisions of this title [sections 7, 8, and 19 above], and the punishment for which is not expressly designated, shall be punished by a fine of not less than one hundred nor more than one thousand dollars, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment, and shall also forfeit the right to vote at such election; and any elector whose right to vote shall be challenged for such cause shall be required to swear or affirm that the matter of the challenge is untrue, before his vote shall be received. Any person so offending against any provision of this title is a competent witness against any other person so offending, and may be compelled to attend and testify upon any trial, hearing, proceeding or investigation in the same manner as any other person. But the testimony so given shall not be used in any prosecution or proceeding, civil or criminal, against the person so testifying except for perjury in giving such testimony. A person so testifying shall not thereafter be liable to indictment, prosecution, or punishment for the offense with reference to which his testimony was given, and may plead or prove the giving of testimony accordingly, in bar of such indictment or prosecution.

SEC. 22. The provisions of this chapter shall extend, so far as applicable, to all elections provided by law, special, general, municipal or school.

Approved March 11th, 1897.

CHAPTER 63.—*Establishment of a branch of the State Miners' Hospital.*

SECTION 1. There shall be established at Park City, Summit County, a branch of the State Miners' Hospital for the treatment of the sick and disabled miners of the State, to be known as the Branch of the State Miners' Hospital.

SEC. 2. The government and control of the Branch of the State Miners' Hospital shall be vested in a board of commissioners to consist of the governor and two other members appointed by the governor, by and with the consent of the senate, who shall be known as the board of commissioners of the Branch of the State Miners' Hospital.

SEC. 3. The board may contract and be contracted with, and may sue and be sued, in all matters concerning the hospital. It may take and hold by purchase, gift, bequest, or devise real and personal property required for its uses, and it may convert property and credits received by gift, bequest, or devise and not suitable for its use into money and property available for its uses.

SEC. 4. The board may appoint a secretary, a treasurer, a medical superintendent, and such other officers as it may deem necessary, and may make by-laws for its own government, and shall have general control and management of the affairs of the hospital. A majority of the members of the board shall constitute a quorum for the transaction of business.

SEC. 5. The board may remove any officer or employee of the hospital by a majority vote of its number, for neglect of duty or for refusal to comply with the by-laws made for the establishment and government of the institution.

SEC. 6. On or before the first day of January of each year, the board shall certify to the State auditor the number of indigent patients, the number of pay patients, and the number of patients who pay in part, and also the amount paid by each.

SEC. 7. Application for admission to the hospital must be made to the medical superintendent under such rules and regulations as the board may establish.

SEC. 8. In case a person received into the hospital shall be possessed of property sufficient to pay the costs of treatment, or any part of the same, he shall be admitted on such terms as the board may fix: *Provided*, That the hospital shall be free to any indigent miner.

SEC. 9. The relatives or friends of any patient in the hospital may pay any portion or all of his expenses therein. Patients who desire it, and shall be able to pay the expenses thereof, may be provided with a special attendant or have such other special care as the superintendent may deem expedient.

SEC. 10. No patient having an infectious or contagious disease shall be admitted into the hospital.

SEC. 11. This act shall take effect only upon condition that there shall be donated and conveyed to the State a suitable site for such hospital, to be subject to the approval of the board of commissioners hereinbefore provided for, and on the further condition that there shall be donated and actually paid to the said board of commissioners the sum of five thousand dollars as a fund to assist in the building of the hospital herein provided for.

SEC. 12. The sum of five thousand dollars is hereby appropriated to be used under the direction and control of the said board of commissioners in the erection of a building for such hospital.

The board of commissioners may expend in the maintenance of the hospital such sums as may be paid into the same by patients, and may also receive gifts, bequests, and devises of personal and real estate and apply the same, or the proceeds thereof, according to the intention of the donors, for the use and benefit of the hospital.

The board shall make semiannual report to the governor of all its transactions.

Approved March 11th, 1897.

WASHINGTON.

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CHAPTER 17.—*Competent men only to be employed on street railways.*

SECTION 1. Hereafter street railways or street car companies or street car corporations, shall employ none but experienced and competent men to operate or assist as conductor, motorman or gripman, in operating cars or dummies upon any street railway or street car line in this State.

SEC. 2. Any violation of section 1 of this act by the president, secretary, manager, superintendent, assistant superintendent, stockholder, or other officer or employee of any company or corporation owning or operating any street railway or street car lines, or any receiver of street railways or street car companies, or street railway or street car corporations appointed by any court within this State to operate such car line shall, upon conviction thereof be deemed guilty of a misdemeanor, and subject the offender for such offense to a fine in any amount of not less than \$50, nor more than \$200, or imprisonment in the county jail for a term of thirty (30) days, or both such fine and imprisonment, at the discretion of the court.

Approved by the governor February 18, 1897.

CHAPTER 22.—*Wages preferred in administration.*

SECTION 1. Section 1075 of volume 2 of Hill's Annotated Statutes and Codes of Washington, is hereby amended to read as follows: Section 1075. The debts of the estate shall be paid in the following order:

* * * * *

4th. Wages due for labor performed within ninety days immediately preceding the death of decedent.

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Approved by the governor February 25, 1897.

CHAPTER 29.—*Bureau of labor.*

SECTION 1. A commissioner of labor and one assistant commissioner to act as factory, mill and railroad inspector, shall be appointed by the governor; they, together with the inspector of coal mines, shall constitute a bureau of labor. On the first Monday in April, 1897, and every four years thereafter, the governor shall appoint two suitable persons, one to act as commissioner of labor, with headquarters at the capital, and the other appointee to act as factory, mill and railroad inspector, both of whom shall hold office until their successors are appointed and qualified.

SEC. 2. It shall be the duty of the officers and employees of the said bureau to cause to be enforced all laws regulating the employment of children, minors and women; all laws established for the protection of the health, lives and limbs of operators in workshops, factories, mills and mines, on railroads and in other places, and all laws enacted for the protection of the working classes, and declaring it a misdemeanor on the part of employers to require as a condition of employment the surrender of any right of citizenship, laws regulating and prescribing the qualifications of persons in trades and handicrafts, and similar laws now in force or hereafter to be enacted. It shall also be the duty of the officers and employees of the bureau to collect, assort, arrange and present in biennial reports to the legislature, on or before the first Monday in January, statistical details relating to all departments of labor in the State; to the subjects of cooperation, strikes or other labor difficulties; to trade unions and other labor organizations and their effects upon labor and capital; and to such other matters relating to the commercial, industrial, social, educational, moral and sanitary conditions of the laboring classes, and the permanent prosperity of the respective industries of the State as the bureau may be able to gather. In its biennial reports the bureau shall also give an account of all proceedings of its

officers and employees which have been taken in accordance with the provisions of this act or of any other acts herein referred to, including a statement of all violations of law which have been observed, and the proceedings under the same, and shall join with such account such remarks, suggestions and recommendations as the commissioner may deem necessary.

SEC. 3. It shall be the duty of every owner, operator or manager of every factory, workshop, mill, mine or other establishment where labor is employed, to make to the bureau, upon blanks furnished by said bureau, such reports and returns as the said bureau may require, for the purpose of compiling such labor statistics as are authorized by this act, and the owner or business manager shall make such reports and returns within the time prescribed therefor by the commissioner of labor, and shall certify to the correctness of the same. In the reports of said bureau no use shall be made of the names of individuals, firms or corporations supplying the information called for by this section, such information being deemed confidential and not for the purpose of disclosing personal affairs, and any officer, agent or employee of said bureau violating this provision shall forfeit a sum not exceeding five hundred dollars, or be imprisoned for not more than one year.

SEC. 4. The commissioner or either inspector of the bureau of labor shall have the power to issue subpoenas, administer oaths and take testimony in all matters relating to the duties herein required by such bureau, such testimony to be taken in some suitable place in the vicinity to which testimony is applicable. Witnesses subpoenaed and testifying before any officer of the said bureau shall be paid the same fees as witnesses before a superior court, such payment to be made from the contingent fund of the bureau. Any person duly subpoenaed under provisions of this section who shall willfully neglect or refuse to attend or testify at the time and place named in the subpoena shall be guilty of misdemeanor, and, upon conviction thereof, before any court of competent jurisdiction, shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail not exceeding thirty days.

SEC. 5. The commissioner of labor, or any inspector or employee of the bureau of labor, shall have power to enter any factory, mill, mine, office, workshop or public or private works at any time for the purpose of gathering facts and statistics such as are contemplated by this act, and to examine into the methods of protection from danger to employees, and the sanitary condition in and around such buildings and places, and make a record thereof, and any owner or occupant of said factory, mill, mine, office or workshop or public or private works, or his agent or agents, who shall refuse to allow an inspector or employee of the said bureau to so enter, shall be deemed guilty of misdemeanor, and upon conviction thereof, before any court of competent jurisdiction, shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars, or be imprisoned in the county jail not to exceed ninety days, for each and every offense.

SEC. 6. No report or return made to the said bureau in accordance with the provisions of this act, and no schedule, record or documents gathered or returned by the commissioners or inspectors, shall be destroyed within two years of the receipt or collection thereof, such reports, schedules and documents being declared public documents. At the expiration of the period of two years above referred to in this section, all records, schedules and papers accumulating in the said bureau that may be considered of no value by the commissioner may be destroyed: *Provided*, The authority of the governor be first obtained for such destruction.

SEC. 7. In addition to the bureau of labor the commissioner of labor, by and with the consent of the governor, shall have the power to employ such other assistants and incur such other expense as may be necessary to discharge the duties of said bureau; such assistants shall be paid for the service rendered such compensation as the commissioner of labor may deem proper, but no such assistant shall be paid more than three dollars (\$3) per day and his necessary traveling expenses.

SEC. 8. The biennial reports of the bureau of labor, provided for by section 2 of this act, shall be printed in the same manner and under the same regulations as the reports of the executive officers of the State: *Provided*, That not less than five hundred copies of the report shall be distributed, as the judgment of the commissioner may deem best. The blanks and other stationery required by the bureau of labor in accordance with the provisions of this act shall be furnished by the secretary of state, and paid for from the printing fund of the State.

SEC. 9. The salary of the commissioner of labor, provided for by this act, shall be twelve hundred dollars (\$1,200) per annum. The salary of the factory, mill and railway inspector shall be twelve hundred dollars (\$1,200) per annum, and they shall be allowed their actual and necessary traveling expenses.

SEC. 10. There is hereby appropriated out of any money in the treasury, not otherwise appropriated, the sum of eight thousand dollars (\$8,000), or so much thereof as may be necessary to carry out the provisions of this act.

Approved by the governor March 3, 1897.

CHAPTER 44.—*Contractor's bond, security for wages of employees.*

SECTION 1. Section 2415, volume 1, Hill's Annotated Code of Washington, is hereby amended to read as follows: Whenever any board, council, commission, trustees or body acting for the State or any county or municipality or other public body shall contract with any person or corporation to do any work for the State, county or municipality, or other public body, city, town or district, such board, council, commission, trustees or body shall require the person or persons with whom such contract is made to make, execute and deliver to such board, council, commission, trustees or body a good and sufficient bond, with two or more sureties, conditioned that such person or persons shall pay all laborers, mechanics and subcontractors and material men, and all persons who shall supply such person or persons or subcontractors with provisions and supplies for the carrying on of such work, all just debts, dues and demands incurred in the performance of such work, which bond shall be filed with the county auditor of the county where such work is performed or improvement made, and, any person or persons performing services or furnishing material to any subcontractor shall have the same right under the provisions of such bond as if such work, services or material was furnished to the original contractor.

Approved by the governor March 6, 1897.

CHAPTER 45.—*Inspection and regulations of coal mines.*

SECTION 1. For the purposes of this act, this State shall be divided into inspection districts, each district to contain not less than ten nor more than sixty coal mines, each district to be under the supervision of an inspector of coal mines, the manner of whose appointment shall be as follows: *Provided*, That there shall be appointed but one inspector until sixty coal mines shall be in operation in this State. The governor shall, upon the recommendation of a board, to be by him selected and appointed for the purpose of examining candidates for appointment to the office of mine inspector under the provisions of this act, appoint a properly qualified person or persons to fill the office of inspector of coal mines for this State. The commissions of said inspector or inspectors shall be for the term of four years, and inspectors shall be at all times subject to removal from office for neglect of duty or malfeasance in the discharge of their duties. Said board shall consist of one practical coal miner, one owner or operator of a coal mine, and one mining engineer, all of whom shall be sworn to a faithful discharge of their duties. The said inspectors shall be citizens of the State of Washington, and shall have had at least five years' practical experience in coal mining. Such person or persons so appointed as inspector shall devote their entire time to the duties of the office, and shall possess other qualifications at present defined by the laws of the State of Washington, and not inconsistent with the provisions of this act. Each of such inspectors shall give bond in the sum of two thousand dollars, with sureties to be approved by a judge of a superior court of the county in which he resides, conditioned for the faithful performance of his duties, and take an oath (or affirmation) to discharge his duties impartially and with fidelity, to the best of his knowledge and ability. The salary of each of such inspectors shall be fifteen hundred dollars (\$1,500) per annum, and he shall have in addition thereto his actual mileage paid out for traveling while in the performance of his duties under the provisions of this act, and the auditor of the State is hereby authorized and directed to draw his warrant on the State treasurer in favor of each of such inspectors for the amount due them for their salaries quarterly, to be paid out of any moneys in the treasury not otherwise appropriated.

SEC. 2. The board of examiners provided for in the next preceding section, shall be appointed by the governor and shall hold office for four years. They shall meet immediately after the passage of this act, at the State capital, for the purpose of examining candidates for the office of mine inspector under the provisions of this act, and at such times thereafter when notified by the governor that from any cause the office of mine inspector has or is about to become vacant. They shall receive as compensation five dollars per day while actually and necessarily employed, and five cents per mile for distance necessarily traveled.

SEC. 3. Where a mine has only one means of ingress and egress, a daily record must be kept by the owner or person in charge of said mine, showing the actual number and the names of each and every person entering the mine for any purpose whatever, and should a greater number of persons than twenty-four be allowed in the mine, under any circumstances, at any time, it shall be the duty of any judge of the superior court of the county in which said mine is situate, when it shall be shown to the satisfaction of said court that more than twenty-four persons were allowed in said mine at any one time, to issue an order closing said mine until a second opening is completed.

SEC. 4. The owner, agent or operator of every coal mine, whether operated by shafts, slopes or drifts, shall provide in every coal mine a good and sufficient amount

of ventilation for such persons and animals as may be employed therein, the amount of air in circulation to be in no case less than one hundred cubic feet per minute for each man, boy, horse or mule employed in said mine, and as much more as the inspector may direct, and said air must be made to circulate through the shafts, levels, stables and working places of each mine, and on the traveling roads to and from all such working places. Every mine shall be divided into districts or splits, and not more than seventy-five persons shall be employed at any one time in each district or split: *Provided*, That where the inspector gives permission in writing a greater number than seventy-five men, but not to exceed one hundred men may be employed in each of said splits: *Provided also*, That in all mines already developed, where, in the opinion of the mining inspector, the system of splitting the air can not be adopted except at extraordinary or unreasonable expense, such mine or mines will not be required to adopt said split air-system, and the owner or operator of any coal mine shall have the right of appeal from any order requiring the air to be split, to the examining board provided for in section 1 of this act, and said board shall, after investigation, confirm or revoke the orders of the mining inspector. Each district or split shall be ventilated by a separate and distinct current of air, conducted from the downcast through said district, and thence direct to the upcast. On all main roads where doors are required, they shall be so arranged that when one door is open the other shall remain closed, so that no air shall be diverted. In all mines where fire-damp is generated, every working place shall be examined every morning with a safety lamp by a competent person, and a record of such examination shall be entered by the person making the same in a book to be kept at the mine for that purpose, and said book must always be produced for examination at the request of the inspector.

SEC. 5. The quantities of air in circulation shall be ascertained with an anemometer; such measurements shall be made by the mine inspector at the inlet and outlet air-ways, also at or near the face of each gangway, and at the nearest cross-heading to the face of the inside and outside chamber, breast or pillar where men are employed, and the headings shall not be driven more than sixty feet from the face of each chamber, breast or pillar, unless for the reason that he deems the same practicable, the inspector gives permission in writing to extend the distance beyond sixty feet.

SEC. 6. No coal mine shall be considered a coal mine for the purpose of enumeration in a district to increase the number of inspectors unless ten men or more are employed at one time in or about the mine, nor shall mines employing less than ten men be subject to the provisions of this act. It shall be the duty of the owner, agent or operator of any mine employing less than ten men in or about said mine to immediately notify the inspector when ten men or more are employed at any one time, said notice to be given within one week. Failure on the part of any owner, agent or operator to comply with this provision shall render the offender liable to a fine of not less than twenty dollars or more than one hundred dollars, with an additional penalty of five dollars per day for each day said notice is neglected to be given.

SEC. 7. It shall be the duty of the inspector of mines to enforce the provisions of this act, and of all other acts for the regulation of coal mines, in accordance with section 2230, vol. 1, Hill's Code, and any infringement of the provisions of this act shall subject the offender to the same penalties as are provided in section 2232, and 2238 of vol. 1, Hill's Code, unless otherwise provided for in this act.

SEC. 8. If at any time the ventilating machinery should break down or otherwise cease operation, or if it is found by the person for the time being in charge of the mine, or any part thereof, that by reason of noxious gases prevailing in such mine, or such part thereof, or of any cause whatever, the mine or said part is dangerous, every workman shall be withdrawn from the mine, or such part thereof as is so found dangerous, and a competent person, who shall be appointed for the purpose, shall inspect the mine or such part thereof as is so found dangerous, and if the danger arises from inflammable gas, shall inspect the same with a locked safety lamp, and in every case shall make a true report of the condition of such mine, or the part thereof, and a workman shall not, except in so far as is necessary for inquiring into the cause of danger, or for the removal thereof, or for exploration, be readmitted into the mine, or such part thereof as was so found dangerous, until the same is stated in such report not to be dangerous. Every such report shall be recorded in a book which shall be kept at the mine for that purpose, and shall be signed by the person making the same.

SEC. 9. The engineer in charge of any ventilating fan or apparatus must keep the same running as the manager of the mine directs in writing. In case of accident to the boiler of fan machinery, he shall immediately notify the mine manager or foreman. If ordinary repairs of the fan or machinery become necessary, he must give timely notice to the mine manager or foreman and await his instructions before stopping it. He shall also examine, at the beginning of each shift, all the fan bearings, stays and other parts, and see that they are kept in perfect working order. He

shall not stop the fan except on the order of the mine manager or foreman, unless it should become impossible to run the fan or necessary to stop it to prevent destruction. He shall then at once stop it and notify the mine manager or foreman immediately and give immediate warning to persons in the mine.

Approved by the governor March 6, 1897.

CHAPTER 47.—*Trade-marks of trade unions, etc.*

SECTION 1. Whenever any person, or any association or union of workingmen has heretofore adopted or used, or shall hereafter adopt or use, and has filed as hereinafter provided any label, trade-mark, term, design, device or form of advertisement for the purpose of designating, making known, or distinguishing any goods, wares, merchandise or other product of labor, as having been made, manufactured, produced, prepared, packed or put on sale by such person or association or union of workingmen or by a member or members of such association or union, it shall be unlawful to counterfeit or imitate such label, trade-mark, term, design, device or form of advertisement, or to use, sell, offer for sale, or in any way utter or circulate any counterfeit or imitation of any such label, trade-mark, term, design, device or form of advertisement.

SEC. 2. Whoever counterfeits or imitates any such label, trade-mark, term, design, device or form of advertisement, or sells, offers for sale, or in any way utters or circulates any counterfeit or imitation of any such label, trade-mark, term, design, device or form of advertisement; or keeps or has in his possession, with intent that the same shall be sold or disposed of, any goods, wares, merchandise or other product of labor to which or on which any such counterfeit or imitation is printed, painted, stamped or impressed; or knowingly sells or disposes of any goods, wares, merchandise or other product of labor contained in any box, case, can or package, to which or on which any such counterfeit or imitation is attached, affixed, printed, painted, stamped or impressed; or keeps or has in his possession, with intent that the same shall be sold or disposed of, any goods, wares, merchandise or other product of labor, in any box, case, can or package, to which or on which any such counterfeit or imitation is attached, affixed, printed, painted, stamped or impressed, shall be punished by a fine of not more than one hundred dollars, or by imprisonment for not more than three months.

SEC. 3. Every such person, association or union, that has heretofore adopted or used, or shall hereafter adopt or use, a label, trade-mark, term, design, device or form of advertisement, as provided in section one of this act, may file the same for record in the office of the secretary of state by leaving two copies, counterparts or facsimiles thereof, with said secretary, and by filing therewith a sworn application specifying the name or names of the person, association or union on whose behalf such label, trade-mark, term, design, device or form of advertisement shall be filed, the class of merchandise and a description of the goods to which it has been, or is intended to be appropriated, stating that the party so filing or on whose behalf such label, trade-mark, term, design, device or form of advertisement shall be filed, has the right to the use of the same, that no other person, firm, association, union or corporation has the right to such use either in the identical form or in any such near resemblance thereto as may be calculated to deceive, and that the facsimile or counterparts filed therewith are true and correct. There shall be paid, for such filing and recording, a fee of two dollars. Said secretary shall deliver to such person, association or union so filing or causing to be filed any such label, trade-mark, term, design, device or form of advertisement, so many duly attested certificates of the recording of the same as such person, association or union may apply for, for each of which certificates said secretary shall receive a fee of one dollar. Any such certificate of record shall, in all suits and prosecutions under this act, be sufficient proof of the adoption of such label, trade-mark, term, design, device or form of advertisement. Said secretary of state shall not record for any person, union or association, any label, trade-mark, term, design, device or form of advertisement that would probably be mistaken for any label, trade-mark, term, design, device or form of advertisement theretofore filed by or on behalf of any other person, union or association.

SEC. 4. Any person who shall, for himself, or on behalf of any other person, association or union, procure the filing of any label, trade-mark, term, design or form of advertisement in the office of the secretary of state, under the provisions of this act, by making any false or fraudulent representations or declaration, verbally or in writing, or by any fraudulent means, shall be liable to pay any damages sustained in consequence of any such filing, to be recovered by or on behalf of the party injured thereby, in any court having jurisdiction, and shall be punished by a fine not exceeding one hundred dollars or by imprisonment not exceeding three months.

SEC. 5. Every such person, association or union adopting or using a label, trade-mark, term, design, device or form of advertisement, as aforesaid, may proceed by

suit to enjoin the manufacture, use, display or sale of any counterfeits or imitations thereof, and all courts of competent jurisdiction shall grant injunctions to restrain such manufacture, use, display or sale, and may award the complainant in any such suit damages resulting from such manufacture, use, sale or display, as may be by the said court deemed just and reasonable, and shall require the defendants to pay such person, association or union all profits derived from such wrongful manufacture, use, display or sale; and such court shall also order that all such counterfeits or imitations in the possession or under the control of any defendant in such cause be delivered to an officer of the court, or to the complainant, to be destroyed.

SEC. 6. Every person who shall use or display the genuine label, trade-mark, term, design, device or form of advertisement of any such person, association or union, in any manner, not being authorized so to do by such person, union or association, shall be deemed guilty of a misdemeanor, and shall be punished by imprisonment for not more than three months, or by a fine of not more than one hundred (100) dollars. In all cases where such association or union is not incorporated, suits under this act may be commenced and prosecuted by an officer or member of such association or union on behalf of and for the use of such association or union.

SEC. 7. Any person or persons who shall, in any way, use the name or seal of any such person, association or union or officer thereof, in and about the sale of goods or otherwise, not being authorized to so use the same, shall be guilty of a misdemeanor, and shall be punishable by imprisonment for not more than three months, or by a fine of not more than one hundred dollars.

SEC. 8. Any person using the trade-mark so adopted and filed by any other person, or any imitation of such trade-mark, or any counterfeit thereof; or who shall, in any manner mutilate, deface, destroy or remove such trade-mark from any goods, wares, merchandise, article or articles, or from any package or packages containing the same, or from any empty or secondhand package which has contained the same or been used therefor, with the intention of using such empty or secondhand package, or of the same being used to contain goods, wares, merchandise, article or articles of the same general character as those for which they were first used; and any person who shall use any such empty or secondhand package for the purpose aforesaid, without the consent in writing of the person whose trade-mark was first applied thereto or placed thereon shall, upon conviction thereof, be fined in any sum not less than one hundred dollars, or by imprisonment for not more than three months, and the goods, wares, merchandise, article or articles, contained in any such secondhand package or packages shall be forfeited to the original user of such package or packages whose trade-mark was first applied thereto or placed thereon. The violation of any of the above provisions as to each particular article or package shall be held to be a separate offense.

SEC. 9. The word "person," in this act, shall be construed to include a person, copartnership, corporation, association or union of workmen.

SEC. 10. Sections 3125, 3126, 3127, 3128, 3129 and 3130 of volume 1. Hill's Annotated Statutes and Codes of Washington, and all acts amendatory thereof, are hereby repealed.

Approved by the governor March 9, 1897.

CHAPTER 80.—*Examination, licensing, etc., of plumbers.*

SECTION 1. Any person, firm or corporation now, or that may hereafter be engaged in, or working at the business in cities of first class, this State, either as a master or employing plumber or as a journeyman plumber, shall first secure a license therefor, in accordance with the provisions of this act.

SEC. 2. Any person desiring to engage in or work at the business of plumbing, either as a master or employing plumber, or as a journeyman plumber, in any city of 5,000 or more, shall apply to the president of the board of health or other officer having jurisdiction in the locality where he intends to engage in or work at such business, and shall at such time and place as may be designated by the board of examiners hereinafter provided for, to whom such application shall be referred, be examined as to his qualifications for such business. In case of a firm or corporation, the examination or licensing of any one member of such firm or the manager of such corporation shall satisfy the requirements of this act.

SEC. 3. There shall be in every city of the first class, having a system of water supply and sewerage, a board of examiners consisting of the president of the board of health, the inspector of plumbing of said city or town, if any there be, and three members who shall be practical plumbers (two shall be master plumbers, one shall be a journeyman plumber); the president of the board of health and the inspector of plumbing shall be members, *ex officio*, of said board and serve without compensation: *Provided*, That in localities where the required number of plumbers can not be secured, such vacancies may be filled by the appointment of reputable physicians.

Said members shall be appointed by the board of health; if there be no board of health or health officer of said city or town, the mayor of said city or town shall, within three months from and after the passage of this act, appoint said board of examiners for the term of one year, said appointment to date from the first day of July, 1897, and thereafter annually, and said appointed members of such board shall serve without compensation: *Provided*, That if in any city or town there is no inspector of plumbing, said board of health shall appoint a fourth member of said board of examiners, who shall be a practical plumber, and whose term of office shall be the same as heretofore provided for said three members.

SEC. 4. Said board of examiners shall, within ten days after the appointment of said members, meet and organize by the selection of a chairman, and shall designate the time and place for the examination of applicants desiring to engage in or at the business of plumbing within their respective jurisdictions. Said board shall examine said applicants as to their practical knowledge of plumbing, house drainage and plumbing ventilation, and if satisfied of the competency of the applicant, shall so verify [certify] to the board of health. Such board shall thereupon issue a license to such applicant, authorizing him to engage in or at the business of plumbing, either as a master or employing plumber, or as a journeyman plumber. The fee for a license for a master or employing plumber shall be \$5; for journeyman plumber shall be \$1. Said license shall be valid and have force in district where issued, and shall be renewed annually upon payment of one dollar.

SEC. 5. The board of health of each city mentioned in section three of this act shall, within three months from and after this act, appoint one or more inspectors of plumbing (if such appointment has not already been made), who shall be practical plumbers, and shall hold office until removed by such board of health for cause, which must be shown. The compensation of such inspectors shall be determined by the city council of said city, and be paid from the treasury of their respective cities. Said inspectors so appointed shall inspect all plumbing work for which permits are hereafter granted within their respective jurisdiction, in process of construction, alteration or repair, and shall report to said board of health all violations of any law, ordinance or by-law relating to plumbing work, and also perform such other appropriate duties as may be required by said board.

SEC. 6. The board of health of each city of the first class in this State having a system of water supply and sewerage shall, within three months from the passage of this act, prescribe rules and regulations for the construction, alteration and inspection of plumbing and sewerage placed in or in connection with any building in such city or town, which shall be approved by ordinance by the council of such city or town, and the board of health shall further provide that no plumbing work shall be done, except in the case of repairs or leaks, without a permit being issued first therefor, upon such terms and conditions as such board of health of said city or town shall prescribe.

SEC. 7. Any person violating any provision of this act shall be deemed guilty of a misdemeanor, and be subject to a fine not exceeding fifty (\$50) dollars, nor less than five (\$5) dollars, for each and every violation thereof. The license of any master or journeyman plumber may be at any time revoked for incompetency, dereliction of duty or other sufficient causes, after a full and fair hearing by a majority of the examining board; but an appeal may be taken from said examining board to the State board of health, and license may be revoked by the examining board provided for in section three (3) of this act.

SEC. 8. All money derived from the licenses issued to applicants shall go to defray the expense of holding such examinations and other necessary expenses of the board of health at place where examination was held.

Approved by the governor March 16, 1897.

WEST VIRGINIA.

ACTS OF 1897.

CHAPTER 59.—*Mine regulations.*

SECTION 1. Sections one, two and three of chapter seventy of the acts of one thousand eight hundred and eighty-three, as amended and re-enacted by chapter fifty of the acts of one thousand eight hundred and eighty-seven, and as further amended and re-enacted by chapter nine of the acts of one thousand eight hundred and ninety, and as further amended and re-enacted by chapter twenty-two of the acts of one thousand eight hundred and ninety-three, entitled "An act concerning the ventilation and drainage of coal mines and for the protection of the lives of persons employed therein," be amended and re-enacted so as to read as follows:

The governor of the State, by and with the consent of the senate, shall appoint

one mine inspector for each of the four mining districts created by this act, and a chief mine inspector, who shall supervise and control the mine inspection of the State of West Virginia, and the chief shall have the power to call the assistance of any one of the other four mine inspectors to any district in the State of West Virginia in case of emergency. And shall keep the reports furnished him by the four mine inspectors, and in addition thereto he shall copy said reports in a book or books by him purchased and kept for the purpose, and he shall index the same, and said books shall be open for inspection upon the request of any citizen of the State, and upon the request of the governor or attorney-general of this State, said chief mine inspector shall lay said books and reports before either of said officers, and also maps of mines furnished him by said mine inspectors.

Any chief mine inspector who shall violate any of the provisions of this act, shall, upon conviction thereof, be fined not less than twenty-five nor more than two hundred dollars, and may, in the discretion of the court, be imprisoned in the county jail not exceeding one year.

And each of the four mine inspectors shall report in writing monthly to the chief inspector, the number and condition of all the mines inspected by him during each month. The chief inspector shall have power to remove any of the four mine inspectors mentioned in this act for causes heretofore mentioned in this act, and the governor of the State shall fill all vacancies caused by removal from office.

Mine inspectors created by this act shall hold their office for the term of four years, as hereinafter provided, unless they be sooner removed, as hereinafter provided. They shall continue in office until their successors in office are appointed and qualified.

Every person so appointed must be a citizen of West Virginia, having a practical knowledge of mining and properly ventilating and draining mines, and must be a coal miner of at least six years' experience as a miner in the coal mines, and he shall not, while in office, be interested as owner, operator, agent, stockholder, superintendent or engineer of any coal mine, and he shall be of good moral character and temperate habits. An inspector of mines shall be removed from office by the chief mine inspector of this State for incompetency, neglect of duty, drunkenness, malfeasance and for other good causes.

Vacancies in office of inspectors shall be filled by appointment by the governor of the State for the unexpired term.

Every person appointed inspector of mines shall, before entering upon the discharge of the duties of his office, take the oath before some person authorized by law to administer oaths, that he will support the Constitution of the United States and the constitution of the State of West Virginia, and that he will faithfully and impartially, to the best of his ability, discharge the duties of his office and file a certificate of his having done so in the office of the secretary of state, and he shall give a bond in the penalty of two thousand dollars, with sureties to be approved by the governor of the State, conditioned that he will faithfully discharge the duties of his office.

The salary of the chief inspector shall be twelve hundred dollars per annum and not more than three hundred dollars for expenses, and the other four mine inspectors shall have one thousand dollars salary, each, per annum, and not more than three hundred dollars for expenses. Such salary and expenses shall be paid monthly out of the State treasury; *Provided*, That before payment of traveling expenses shall be made to the inspector, he shall file an account of such expenses and make out and file with the auditor that they were accrued in the discharge of his official duties.

On the first Tuesday in April, one thousand eight hundred and ninety-seven, and every four years thereafter, the governor of the State shall, with the consent of the senate, appoint one mine inspector for each of the four mining districts of the State created by this act, whose term of office shall begin when he has taken the oath of office and has given the approved bond, as required by this act, and whose term of office shall be four years, or until his successor shall be duly appointed and qualified. And it shall be his duty to visit each mine in his district at least once in every three months, and it shall be unlawful for any mine inspector to do any surveying for any mine owner or owners, during his term of office, and it shall be unlawful for any mine inspector to appoint any deputy or other person to do and perform any work required of such mine inspector, and it shall be his duty to personally perform the duties of his office hereunder.

Any mine inspector failing to comply with the requirements of this act, shall be guilty of a misdemeanor and upon conviction thereof shall be fined not less than one hundred dollars nor more than five hundred dollars, and be dismissed from office.

The governor of the State of West Virginia, together with the chief mine inspector created by this act, shall divide the State of West Virginia into four mining districts.

All acts and parts of acts, inconsistent with this act are hereby repealed.

Passed February 17, 1897. In effect ninety days from passage. Became a law over the governor's veto.

RECENT GOVERNMENT CONTRACTS.

[The Secretaries of the Treasury, War, and Navy Departments have consented to furnish statements of all contracts for constructions and repairs entered into by them. These, as received, will appear from time to time in the Bulletin.]

The following contracts have been made by the office of the Supervising Architect of the Treasury:

DETROIT, MICH.—March 8, 1898. Contract with William Wright Company, Detroit, Mich., for decorative painting of post-office, court-house, etc., \$11,333. Work to be completed within five months.

DETROIT, MICH.—March 8, 1898. Contract with A. Harvey's Sons Manufacturing Company, Detroit, Mich., for stokers and furnaces in connection with boilers for post-office, court-house, etc., \$3,400. Work to be completed within four months.

PUEBLO, COLO.—March 9, 1898. Contract with Gardner Elevator Company, Detroit, Mich., for one hydraulic passenger elevator complete for post-office, \$3,575. Work to be completed within three months.

MILWAUKEE, WIS.—March 24, 1898. Contract with Charles B. Kruse Heating Company, Milwaukee, Wis., for boiler plant, low pressure and exhaust steam heating and mechanical ventilating apparatus, etc., for post-office, court-house, and custom-house, \$54,633. Work to be completed within one hundred and ten working days.

PHILADELPHIA, PA.—March 26, 1898. Contract with George L. Remington, Philadelphia, Pa., for storage vault for silver dollars for the United States mint building, \$139,737. Work to be completed before January 1, 1899.

DENVER, COLO.—March 29, 1898. Contract with John A. McIntyre, Denver, Colo., for foundation, superstructure, and roof covering of the United States mint building, \$247,874.09. Work to be completed within fifteen months.

MILWAUKEE, WIS.—April 5, 1898. Contract with Bentley Construction Company, Milwaukee, Wis., for approaches to post-office, court-house, and custom-house, \$18,937. Work to be completed within seventy-five days.

OMAHA, NEBR.—April 6, 1898. Contract with Joseph Barborka, Iowa City, Iowa, for tower clock and bell for court-house, custom-house, and post-office, \$2,760. Work to be completed within five months.

OMAHA, NEBR.—April 7, 1898. Contract with Crane Elevator Company, Chicago, Ill., for two electric passenger elevators, one electric mail lift, and one electric ash lift for court-house, custom-house, and post office, \$8,500. Work to be completed within ninety days.